1995

Expectations and job search behavior among graduating university seniors

Anna Rebekah Erickson
Iowa State University

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Expectations and job search behavior among graduating university seniors

by

Anna Rebekah Erickson

A Dissertation Submitted to the Graduate Faculty in Partial Fulfillment of the Requirements for the Degree of DOCTOR OF PHILOSOPHY

Department: Psychology
Major: Psychology

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For the Graduate College

Iowa State University
Ames, Iowa
1995
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF TABLES</td>
<td>iv</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>v</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>vi</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>viii</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>REVIEW OF THE LITERATURE</td>
<td>7</td>
</tr>
<tr>
<td>The Effects of Expectations on Behavior</td>
<td>7</td>
</tr>
<tr>
<td>Expectations of Self</td>
<td>17</td>
</tr>
<tr>
<td>Locus of control</td>
<td>19</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>26</td>
</tr>
<tr>
<td>Expectations about the Job Market</td>
<td>32</td>
</tr>
<tr>
<td>Economic Psychology</td>
<td>38</td>
</tr>
<tr>
<td>THE PRESENT STUDY</td>
<td>42</td>
</tr>
<tr>
<td>METHOD</td>
<td>44</td>
</tr>
<tr>
<td>Participants</td>
<td>44</td>
</tr>
<tr>
<td>Instruments</td>
<td>45</td>
</tr>
<tr>
<td>Career locus of control</td>
<td>45</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>46</td>
</tr>
<tr>
<td>Perceptions of the economy</td>
<td>48</td>
</tr>
<tr>
<td>Job search activity</td>
<td>49</td>
</tr>
<tr>
<td>RESULTS</td>
<td>53</td>
</tr>
<tr>
<td>Preliminary Analyses</td>
<td>53</td>
</tr>
<tr>
<td>Scale reliabilities</td>
<td>53</td>
</tr>
<tr>
<td>Correlations between scales</td>
<td>56</td>
</tr>
<tr>
<td>Table 1:</td>
<td>Internal consistency reliability for scales (n=370).</td>
</tr>
<tr>
<td>---------</td>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td>Table 2:</td>
<td>Pearson product moment correlations among variables (n=370).</td>
</tr>
<tr>
<td>Table 3:</td>
<td>Variance inflation factors (VIFs).</td>
</tr>
<tr>
<td>Table 4:</td>
<td>Means scores for all variables for entire sample (n=370).</td>
</tr>
<tr>
<td>Table 5:</td>
<td>Participants' plans for Fall 1994.</td>
</tr>
<tr>
<td>Table 6:</td>
<td>Variable means by Plans for Fall and Employment Status.</td>
</tr>
<tr>
<td>Table 7:</td>
<td>Differences in job search steps utilized by students who had obtained job offers and those who had not (n=309).</td>
</tr>
<tr>
<td>Table 8:</td>
<td>Differences in job search steps utilized by students who had accepted job offers and those who had not (n=309).</td>
</tr>
<tr>
<td>Table 9:</td>
<td>Dates for initiating various job search steps (309).</td>
</tr>
<tr>
<td>Table 10:</td>
<td>Differences in means between clusters on date of initiating job search and GPA.</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

Figure 1: Job search steps employed by participants planning to work full time in the fall (n=309). 65
Figure 2: Mean, Median, and Modal dates for initiating various job search steps measured in weeks before graduation (n=309). 70
Figure 3: Semi-partial $R^2$ plotted against number of clusters (n=309). 73
Figure 4: Variable means for first cluster (n=67). 74
Figure 5: Variable means for second cluster (n=63). 76
Figure 6: Variable means for third cluster (n=33). 78
Figure 7: Variable means for fourth cluster (n=62). 80
Figure 8: Variable means for fifth cluster (n=40). 82
Figure 9: Variable means for sixth cluster (n=35). 84
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ABSTRACT

This study was designed to examine the effects of expectations on the job search activity of university seniors. Participants included 370 graduating seniors (194 male, 171 female) at Iowa State University. The questionnaire was designed to measure attitudes toward job searching, expectation about the job market, and job search activity. Attitudes toward job searching was measured using the Career Locus of Control Scale (Trice, Haire & Elliott, 1989); the Job Search Self-Efficacy portion of the Outplacement Needs Inventory (Kanfer & Hulin, 1985); and the Job Seeking Confidence scale developed by the Institute for Social Research at the University of Michigan (van Ryn & Vinokur, 1992). Expectations about the job market were measured with the Employment Outlook segment of the Career Exploration Survey (Stumpf, Colarelli & Hartman, 1983); and the Business Conditions portion of the Survey of Consumers. Job search activity was measured by asking students to indicate the onset of job search activity, the number of job search activities undertaken, the frequency of job search and the amount of time spent looking for a job. Cluster analysis was used to divide students into 6 groups based upon attitudes toward the job search and expectations about the job market. Comparisons were made among the 6 resulting clusters on job search activities and GPA. Manova was performed to determining whether the clusters differed in job search activity or
ability (GPA). Results revealed that optimistic of students began their job search earlier than pessimistic students (p<.05) and that students with greater job seeking confidence also tended to report higher GPAs (p<.05).
INTRODUCTION

The U.S. Department of Education, National Center for Education Statistics estimates that over one million people received bachelors degrees during the 1993-1994 academic year (U.S. Department of Education, 1993). Although many of these students had jobs upon graduation, many did not. Still others had not even begun to look for a job until after graduation.

What determines whether a new graduate will find a job? Qualifications such as academic performance, university activities, employment status before graduation, and impressive job references certainly play an important role in determining who gets the best jobs. For example, Marshall (1985) compared recent college graduates who had either been successful or unsuccessful in finding a job 90 days after graduation. She found that successful job applicants were more likely to characterize their job references as "impressive", were more likely to have been employed before graduating from college and had an average grade point average of B or better in business courses.

Other researchers have also found evidence that academic performance influences which students will receive job offers. For example, Campion (1978) found academic performance to be influential in the job interview. Campion's study examined the effects of various applicant characteristics, such as academic major, extra curricular activities, and grade point average, on interview impressions. Multiple regression of
Interviewers’ evaluations with applicant predictor variables revealed that undergraduate GPA had the greatest impact of all the predictor variables on over-all general impression and personal liking aspects of interviewers’ ratings. Undergraduate GPA, together with membership in fraternity or sorority, also influenced interviewers judgments of chances of further consideration. Keenan (1979) also found academic performance to be related to interview success, with those with higher GPAs being more likely to succeed in the interview.

Work related experience before graduation has also been shown to be related to success in the job search. For example, Keenan and Scott (1985) reported that students holding part time jobs related to their field of study were more likely to be called back for a second interview and were more likely to receive a job offer following an interview, than those without such experience. Carroll (1966) found that business studies graduates interviewing for jobs were more likely to be successful if they had had experience working in an office setting.

Clearly, qualifications are an important influence in finding a job. However, even the most qualified individuals will not find jobs if they do not look for a job. Campus placement counselors, in accord with the scores of job search books published annually, often put little emphasis on qualifications, advising job seekers that choice jobs are
bestowed upon those with the best job seeking skills rather than to the most qualified individuals.

Research does support the position that the degree and intensity of job seeking activities are important and that the way one looks for a job may be as important as one's qualifications for that job. For example, Wielgosz and Carpenter (1987) reported significant differences in job search duration depending upon the job search methods employed. Their research demonstrated that among the unemployed, individuals who used multiple job search methods found jobs much more quickly than those who relied on only one method. According to a study by Jones (1985), the relationship between qualifications and quality of job obtained may not be a direct relationship, but one that is mediated by job search activities. This study revealed that poorly qualified individuals actually made fewer applications and displayed less adequate job seeking skills than their better qualified classmates. Kanfer and Hulin (1985) also found that job seeking skills play an important role in determining who will become reemployed the soonest. Their study of 35 former hospital employees who had been laid off, revealed that reemployed individuals had engaged in a greater number of search behaviors than those who remained unemployed. The reemployed workers also possessed significantly more confidence in their ability to find a job. Still other research has shown that training unemployed adults in job
seeking skills can result in higher paying and more satisfying jobs (Caplan, Vinokur, Price, & Van Ryn, 1989).

A number of researchers have reported that formal job seeking methods (such as use of a college placement office, private placement agency or executive search firm, state employment services, and advertisements in newspapers or trade journals) are more effective than informal sources (such as personal contacts, and referrals from friends and relatives) in helping students find employment (Allen & Keaveny, 1980). Other research has indicated that informal methods are superior (Granovetter, 1974; McKersie & Ullman, 1966; Wielgosz & Carpenter, 1987) or at least just as good (Reid, 1972) as formal sources. It has been suggested that differences between studies may be the result of economic conditions (Allen & Keaveny, 1980). When jobs are more plentiful than qualified applicants, employers are more likely to make use of formal channels such as campus recruiting. During these times use of formal channels would result in shorter job search duration. However, when applicants for jobs far out number positions available, employers do not make use of formal channels as heavily, causing informal channels to be more efficient for job seekers.

Preparation for the job search is also important. Keenan and Scott (1985) demonstrated that preparing for an interview can impact its outcome. These researchers found that the length of time spent reading company literature prior to an
interview was positively correlated with the number of second
interviews obtained and the number of job offers received.
Carroll (1966) reported the physical appearance of an
applicant during an initial interview was related to success
during the interview. Scheider and Stevens (1971) found that
individuals with specific and realistic job goals obtained
jobs more quickly than those whose goals were vague or
unrealistic.

The notion that one should put the same effort and
careful planning into finding a job that one has put into
training for that job should not surprise students. Yet
although most students would probably like to find a good job,
there are great differences in the enthusiasm with which the
task of finding a job is undertaken. Almost half of those
receiving bachelors degrees in 1991 had already begun their
job search six months before graduation (Waldrop, 1992), yet
there appears to be a great deal of variation in how
diligently this search is conducted.

What individual differences might contribute to the
variation in job search activities? Researchers exploring job
search behaviors, usually focusing on the unemployed, have
isolated a number of individual factors related to the
variability in job seeking behaviors. These include locus of
control (Friedrich, 1987; Plumly & Oliver, 1987; Trice, Haire,
& Elliott, 1989), self-esteem (Baik, Hosseini, & Priesmeyer,
1989; Ellis & Taylor, 1983), perceived social support

The present study addresses the influence of expectations on the job search process. The expectations examined will include expectations regarding the economy and the number of jobs available as well as expectations regarding the ability to obtain the jobs that are available.
REVIEW OF THE LITERATURE

The Effects of Expectations on Behavior

A number of theorists have proposed that expectations influence both motivation and behavior. One of the earliest to recognize the importance of expectations was Tolman (1932) as he introduced a cognitive component to theories of learning. In contrast to the behavioristic theories of learning which prevailed at the time, Tolman proposed that both people and animals have knowledge of goals, and expectations regarding the outcomes of their behavior (Tolman, 1932). According to Tolman, expectations involve knowledge about the relationships between and among stimuli and responses. These expectations may be in response to stimuli which were presented at some time in the past, stimuli which are currently present or stimuli which are anticipated.

Lewin (1938), like Tolman (1932), described motivation in terms of cognitive choices among alternatives, emphasizing the role of individual aspirations, expectations, and affect. Lewin agreed with the behaviorists that a person is a function of his or her environment \((P = f(E))\). But he also recognized that the environment is perceived differently by different people and therefore the environment is also a function of the person \((E = f(P))\). According to Lewin, behavior results from an interaction between an individual and his or her environment \((B = f(P,E))\). Therefore an individual's expectations will heavily influence his or her perceptions.
The ideas of Tolman and Lewin laid the groundwork for a number of theories of motivation which emphasized the roles of expectancies and valences in determining behavior. Expectancy theories which followed include those of Adams, Atkinson, Edwards, Locke, Peak, and Rotter (Lawler, 1971; Weiss, 1990). Vroom (1964) was the first to apply these concepts specifically to motivation toward work behavior (Lawler, 1971; Mitchell, 1982; Muchinsky, 1993).

In his book introducing his theory of work motivation, Vroom (1964) expressed his frustration with industrial psychology's lack of integration of theories from other areas of psychology and conveyed his belief in the general need for formal theory in the field of industrial psychology:

In focusing on the motivational aspects of the relationship between men and their work, the industrial psychologist should be able to make use of and contribute to the development of theories of behavior...Unfortunately it does not appear that this potential is being realized (Vroom, 1964, p. 4).

In introducing expectancy theory to the field of industrial psychology, Vroom's intent was to present a theory which integrated existing knowledge in the fields of work and motivation. This theory was intended to explain not only behavior in the work-place, but behavior in general. "We also assume that there is lawfulness in the behavior of individuals which transcends the boundaries of applied fields. It is
exceedingly unlikely that the behavior of persons in work situations is governed by processes that are basically different from behavior in other types of situations."
(Vroom, 1964, p.5-6).

According to Vroom's expectancy theory, motivation toward an action and choices among alternatives are influenced by various forces. The strength of these forces is determined by three elements: valence, expectancies, and instrumentality. Valence is the anticipated satisfaction from the various possible outcomes; this element is related to, but not the same as an individual's values. Expectancies are beliefs about the likelihood that a specific outcome will result from a particular action. Instrumentality is an outcome-outcome association related to whether an individual believes that a secondary outcome will follow from the first outcome. For example, an employer may offer some incentive for performance, such as a pay increase or promotion. In this illustration, an individual's expectancies would refer to his or her belief that an increase in effort will lead to better performance. Instrumentality would refer to the belief that better performance will lead to a raise in pay, a promotion or feelings of accomplishment. Valence would refer to the belief that each specific outcome (i.e., pay, promotion, feelings of accomplishment) would be satisfying to the individual, with each outcome manifesting a different level of valence depending upon the individual's values.
According to Vroom’s theory, outcomes or incentives can only act as performance motivators to the extent that the individual values the proposed outcomes and perceives that their effort will lead to those outcomes. For example, an individual may desire to obtain a pay raise, but if that individual does not believe an increase in effort on the job will lead to that pay raise, motivation to perform the job will not increase. Expectations are therefore important to motivational force. An outcome can only work as a motivator to the extent the individual expects effort will lead to obtaining that outcome.

Vroom introduced expectancy theory as a model to explain both occupational choice and work motivation, advocating applications to both vocational and industrial psychology (Vroom, 1964). The theory has found general support from the numerous studies which have been conducted, especially in its applications to predicting job or occupational choice (Kanfer, 1990; Mitchell, 1982). For example, Brooks and Betz (1990) found that the interaction between expectancy and valence predicted occupational choice among college students, and that expectancy alone was as good a predictor as the product. Arnold (1981) also found support for the interaction of expectancy and valence predicting motivational force related to job outcomes and job preference among undergraduates. Teas (1981) found strong support for Vroom’s traditional valence model in predicting job preference and anticipated
satisfaction. Muchinsky and Taylor (1976) tested the effectiveness of Vroom's model for occupational preference. Using a within-subjects analysis, these researchers found support for the application of Vroom's model to questions of occupational choice.

Because Muchinsky and Taylor used within-subjects analysis, they did not compare subjects with one another. Preferences for different occupations were compared for each person. In a within-subjects analysis, each individual serves as a unit of analysis. Between-subjects analyses make comparisons across individuals which vary on some independent variable. Overall, the use of expectancy-theory to predict between-subjects differences in effort or performance has not been as successful as its use in making within-subjects predictions (Mitchell, 1982; Schwab, Olian-Gottlieb, & Heneman, 1979). For example, expectancy theory has not been successful in predicting withdrawal behavior such as turnover as a between-subjects variable (Birkenback & Van der Merwe, 1983; Mitra & Bhattacharyya 1983), but has been successful in predicting within-subjects preference for retirement or continued employment (Eran & Jacobson, 1976). Malloch and Michael (1981) were able to predict academic performance by examining ability (as determined by ACT scores) and expectancy. However, valence and instrumentality constructs did not contribute to the prediction of academic performance.
Use of Vroom's expectancy theory to predict effort on the job has found varying degrees of empirical support. Orpen (1976) found that valence for pay was more highly associated with job performance among employees who believe that pay and performance are highly related (high instrumentality) than among those who perceive a weak relationship between pay and performance (low instrumentality). Oliver (1974) found that valence and instrumentality perceptions related to incentive outcomes were strongly related to productivity among salesmen. Arvey and Neel (1974) found that employee expectancies regarding whether performance would lead to rewards interacted with supervisory style to successfully predict performance levels among engineers.

Mitchell (1974) reviewed 21 studies attempting to predict job effort using expectancy theory, either as proposed by Vroom or as some variation of Vroom's theory. All but two of these studies reported some support for the theory's use in predicting effort on the job, although the relationships were not as strong as those found when using expectancy theories to predict attitude or occupational choice. It may be worth noting that Vroom's expectancy theory seems to be more successful in predicting self reported effort than in predicting objective or observer ratings of effort (Mitchell, 1974, 1982; Schwab, Olian-Gottlieb, & Heneman, 1979). For example, expectancy theory has successfully predicted self ratings of effort for work performed by engineers (Kopelman &
Thompson, 1976) and academic effort among college students (Muchinsky, 1977).

Although Vroom's theory is the best known expectancy theory within the fields of industrial and organizational psychology, it is only one of a large family of theories of human motivation which recognize the influence of expectations and values on behavior (Lawler, 1971; Feather, 1982). These basic concepts have been also utilized in theories of Achievement Motivation (Atkinson, 1957), Social Learning (Rotter, 1954), and Attribution Theory (Weiner, 1982).

For example, Rotter (1954) developed his Social Learning Theory in an attempt to integrate reinforcement theories and cognitive theories of behavior (Rotter, 1982). According to Rotter's social learning theory, the relationship between reinforcement and behavior is mediated by expectancy of the occurrence of reinforcement in a specific situation and the value of that reinforcement in the situation. These expectancies are based in part upon past learning. Social learning theory takes into account that the behavior varies as the situation does but also that there is transsituational generality in behavior. "Expectancies in each situation are determined not only by specific experiences in that situation, but also to some varying extent, by experiences in other situations that the individual perceives as similar" (Rotter, 1982, p. 243). An interaction between the person and his or her environment creates explicit and implicit cues,
establishing what Rotter called a *psychological situation*. Expectancies for behavior-reinforcement sequences and for reinforcement-reinforcement sequences are determined by these cues. Reinforcements can act to strengthen expectancies that a particular behavior will be followed by reinforcement in the future.

Expectations regarding the probability of reinforcement are also important in McClelland and Atkinson's Theory of Achievement Motivation (Atkinson, 1957, 1964; McClelland, Atkinson, Clark, & Lowell, 1953). According to the theory, an individual's motivation to engage in a specific behavior is determined by (1) the person's motive to achieve success, (2) the person's beliefs about the probability of success, and (3) the incentive value of success for any particular task. These three variables combine in a multiplicative relationship to influence the tendency to achieve success \((T_s = M_s \times P_s \times I_s)\). This theory assumes that the motive to achieve success is a personality trait which remains fairly stable across situations. It also assumes that there is a direct, negative relationship between the individual's subjective beliefs about the probability of success for a given task and the incentive value of success for that task (such that \(I_s = 1 - P_s\)). In other words, the lower the probability of success, the more valuable success becomes to the individual.

Because of the relationship between the variables, the theory of achievement motivation predicts that people with a
high need for achievement (motive to achieve success) will prefer tasks of moderate difficulty, since this would maximize the $I_g \times P_g$ relationship, which in turn would maximize the tendency to achieve success (since $T_s = M_s \times P_s \times I_s$). However, certain individuals may also possess a motive to avoid failure, which can cause these people to avoid taking action, choose very easy or very difficult alternatives, or purposely engage in activities which would inhibit their performance (Atkinson, 1964; Berglas & Jones, 1978; Horner, 1972; Mahone, 1960).

Feather (1982, 1992) developed his expectancy-value theory in an attempt to delineate the relationship between expectations, values and actions. According to Feather an individual's values and needs generate valences toward specific events and potential outcomes. Valences, according to Feather, are the affective meanings associated with a situation. Synonymous with the terminology used by Lewin and Vroom, positive valence represents a general subjective attractiveness of an event or object, while negative valence denotes adversiveness toward an event or object. Valences interact with expectations in determining or influencing actions.

This expectancy-value theory as described by Feather (1982, 1992) has been successful applied to the prediction of job-seeking behaviors. Feather and O'Brien (1987) tested this expectancy-value theory's capacity to explain individual
differences in job seeking behavior among 320 young unemployed men and women in Australia. These researchers measured expectation of finding a job with a factor they called 'control-optimism'. Their measure of 'control-optimism' was generated via factor analysis of a number of job-seeking and unemployment related items. It included items measuring unemployment helplessness ("How helpless do you feel about your unemployment?")}, job confidence ("How confident are you about finding the job you really want in the near future?" and "How confident are you about finding any kind of job at all in the near future?")}, stability of unemployment ("In the future, if your unemployment continues, will the cause of unemployment still be present?") and personal uncontrollability of unemployment ("Can you do anything to change the cause of your unemployment?"). Job valence was measured through another scale created through the same factor analysis. This scale included items measuring job need ("How much do you feel you need a job?")}, unemployment disappointment ("When you think about being unemployed, or the possibility of being unemployed, how does it make you feel?")}, and unemployment depression ("How depressed do you feel about your unemployment?").

Job seeking behavior was measured with a single item asking "How frequently do you look for a job?" for which respondents were asked to choose 'not looking for a job', 'when I feel like it', 'monthly', 'every couple days', or
'daily'. Conducting a path analysis, these researchers found that job valence was related to job seeking behavior, but control-optimism was not. Control-optimism tended to be more closely related to the length of time unemployed. The authors suggest that the failure to obtain the hypothesized relation between control-optimism and job-seeking behavior may have been due to deficiency in the dependent variable, including the fact that the dependent variable was measured using a single item. The authors also refer to a possible inadequacy in their measure of expectation, comprising measures of optimism and control.

Expectations of Self

One type of expectation which strongly influences our behavior involves our expectations about ourselves. Most cognitive based theories in psychology recognize that the way we view ourselves effects the way we behave. Some of the strongest assertions regarding the effects of self-expectations on behavior are made by theorist in the social learning theory tradition. Social learning theorists such as Bandura (1977b) and Rotter (1954) added a cognitive component to traditional behavioristic, stimulus-response theories of learning. These theorists emphasized the importance of intervening cognitive variables such as expectations in explaining how reinforcers may or may not influence our behavior.
One of the fundamental principles of social learning theory is that "cognitive processes play a role in the acquisition and retention of new behavior patterns" (Bandura, 1977a, p. 192). According to these theories, cognitive components, such as expectations and values may influence or modify the effects of reinforcement on behavior. With concepts and terminology similar to Vroom's (1964) expectancy theory, Rotter (1975) explains that social learning theory specifies three major determinants of behavior potential: (1) the expectancy for reinforcement to follow behavior; (2) the value of the reinforcement; and (3) the psychological situation. Thus, our expectations for ourselves, our abilities, and our control over our environment have substantial impact on the behaviors and activities we choose to perform.

Two important constructs dealing with an individual’s expectations for reinforcement have emerged from the social learning theories of behavior. **Locus of control** deals with the person’s beliefs about the causal nature of the behavior-outcome sequence (Rotter, 1966); while **self-efficacy** refers to an individual’s beliefs about whether he or she is able to perform the behaviors required to produce a reinforcing outcome (Bandura, 1977b). Each of these constructs has been shown to be related to job search activities.
Locus of control

Julian Rotter first introduced the concept of locus of control in the mid-1950's, within the framework of social learning theory. Behavioral theories of learning suggest that our actions are effected by our past history of reinforcement. Behaviors which have been reinforced are more likely to be performed again; while behaviors which have not been reinforced or have been punished, will decrease in frequency. However, Rotter (1966, 1982) proposed that the effects of reinforcement on learning are mediated by the individual’s beliefs about the causal relationship between his or her actions and the outcome of those actions. If a person perceives that reinforcement was caused by something he or she did, learning will result and the individual will be more likely to perform the behavior again in the future. However, if the individual believes that the outcome was caused by factors out of his or her control, learning (in the form of changed behavior) is less likely to occur.

In its simplest form, our basic hypothesis is that if a person perceives a reinforcement as contingent upon his own behavior, then the occurrence of either a positive or negative reinforcement will strengthen or weaken potential for that behavior to recur in the same or similar situation. If he sees the reinforcement as being outside his own control or not contingent, that is depending upon chance, fate,
powerful others, or unpredictable, then the preceding behavior is less likely to be strengthened or weakened. Not only will there be a difference of degree but also a difference, in some instances, in the nature of the function as the result of a series of trials (Rotter, 1966, p. 5).

Therefore, the process of learning differs depending upon whether an individual perceives a task to be primarily influenced by skill or chance.

Rotter and his colleagues did demonstrate that learning under skill conditions differed from learning under chance conditions. For example, past successes had greater effect on subjects' expectancies for future success when they were told that success depended upon their skill (Phares, 1957). Subjects were also more persistent at a task they had previously been consistently successful performing if they had been told the success was based upon 'skill' rather than 'chance' (James & Rotter, 1958; Rotter, Liverant, & Crowne, 1961).

Rotter hypothesized that an individual's history of reinforcement may influence the degree to which he or she attributes reinforcements to his or her own actions (Rotter, 1966, 1982). This history of reinforcement may therefore lead to a generalized expectation that events are either within control of or outside the control of the individual. This personality variable was labeled 'locus of control'. People
with an **internal** locus of control exhibited a tendency to believe that outcomes were caused by their own efforts, behavior, or due to relatively permanent individual characteristics. People with an **external** locus of control tended to view events as having been caused by factors out of their control, such as fate, luck, chance, caused by powerful others, or due factors to complex to be predictable.

In 1966 Rotter published in *Psychological Monographs* the I-E scale, a test measuring locus of control, along with reliability, discriminant validity and normative data for the test. This instrument contained 29 forced choice items and was a revision of a 60-item scale developed by Phares (1957). Rotter anticipated that most individuals would fall in the middle of the Internal-External continuum when scoring the scale, because "individuals at both extremes of the internal versus external control of reinforcement dimension are essentially unrealistic" (Rotter, 1966, p. 4). This expectation was confirmed, with scores for both male and female students being approximately normally distributed with means of 8.15 (males) and 8.42 (females) on a scale from 0 to 20. In addition, Rotter reported test-retest and internal consistency reliability for the I-E scale as calculated for a number of samples $r_{xx} = .49$ to $r_{xx} = .83$, with most estimates approximating $r_{xx} = .70$.

Rotter also reported validity data for his scale and the locus of control construct. Studies demonstrated that "the
behavior of externals differed from that of internals in the same way that the overall population differed under chance instructions as compared with skill instructions" (Rotter, 1966, p. 19 referring to James, 1957).

In introducing locus of control, Rotter (1975) proposed that the variable may be specific to a situation or generalized across situations. Experience with a specific type of situation creates expectations about locus of control for that type of situation. The more novel a situation is to an individual, the more important that person's generalized locus of control will be in influencing behavior.

A number of studies have demonstrated that experience in the job search process influences locus of control. For example, Baubion, Megemon and Sellinger (1989) found that among unemployed workers in France, locus of control became more external as length of unemployment increased. In addition, the unemployed became less confident and less hopeful about future employment, and decreased their receptivity to employment information as unemployment continued.

Mallinckrodt and Pretz (1988) measured locus of control as one of several stress symptoms among unemployed professionals over the age of 40. These researchers found that stressors including financial concerns and increasing length of unemployment were related to a decrease self-esteem, a more external locus of control and a decrease in job seeking
behaviors. However, these researchers also found that access to a social support system decreased the effects of the stressors on locus control, self-esteem, and job seeking activities.

Social learning theory as outlined by Rotter asserts that our experience influences locus of control, which in turn affects our future behavior. So this theory would predict that just as level of success in the job search influences locus of control, locus of control influences the job search. Research tends to support this hypothesis. For example, Baubion, Megemon, and Sellinger's (1989) study revealed that as length of unemployment increased, not only did locus of control become more external, the study participants also decreased their receptivity to employment information. Plumly and Oliver (1987) suggest that internally and externally oriented locus of control individuals may differ in their job searching behavior depending upon rate of unemployment and job market conditions.

Friedrich (1987) studied the relationships between locus of control and job search activities in undergraduates seeking summer employment. His findings indicated that individuals with external locus of control as evidenced by scores on the Vocational Locus of Control Scale, sought less information regarding job alternatives, generated fewer alternatives, considered fewer evaluative criteria, and engaged in less
advanced planning than those with an internal locus of control.

A study by Holmes and Werbel (1992) presents further evidence of the importance of locus of control in the job search process. Their study compared subjects who had obtained employment within three months of their job loss to those who remained unemployed. Those who had found a job were more "internal" in locus of control, had greater self-efficacy, and possessed better problem-solving skills than those who had not.

Rotter's social learning theory with its locus of control construct is similar to the attribution theory of Weiner and his colleagues (Weiner, 1979; Weiner, Russell, & Lerman, 1978). Weiner's theory asserts that people explain success and failure experiences using three dimensions. The individual may describe the outcome of a situation as being due to skill or effort, in which case the individual has made an internal attribution. Alternatively, the individual may attribute the outcome to external forces, such as luck, task difficulty, etc. This internal versus external dimension is what Weiner termed the Locus Dimension. The individual may also evaluate the stability of the cause of the outcome, making attributions which are categorized as either stable, such as ability or task difficulty, or unstable, such as luck and effort. Weiner called this the Stability Dimension. Finally, some factors are directly under the control of the
individual, such as effort. Other factors are quite uncontrollable, such as ability and luck. This is what Weiner labeled the Controllability Dimension.

Like Rotter’s theory, these attributions are learned and based upon experience (success or failure). According to Weiner (1979), after an individual experiences success or failure, he or she will make an appraisal of the situation in his or her mind. Locus has the greatest impact on an individual’s affect or emotional reaction to a situation; therefore we tend to attribute failure to external causes to protect self-esteem. Stability affects one’s behavior by changing one’s expectations of future success or failure. Controllability is assumed to have an impact on both emotional and behavioral reactions. People who attribute performance to controllable factors tend to experience more positive emotional reactions and are more optimistic in their expectations for future performance.

Kulik and Rowland (1989) investigated undergraduates during their job search to determine the effect of success or failure on their beliefs about the cause of the success or failure of their job search strategy. These researchers reported differences in locus of control and stability of influential variables between successful and unsuccessful job searchers. Students who described their search as a success tended to perceive stable and internal factors as influencing their job search outcomes. Subjects who viewed their job
search as a failure deemphasize internal and stable factors, and attributed the outcomes to external factors beyond their control. Basing their study on Weiner's attribution theory, Kulik and Rowland submit that deemphasizing internal and stable attributions allows failing job seekers to protect their self-esteem and retain optimism for the future.

Like locus of control, causal attributions can influence future behavior. For example, when Sherman, Skove, Hervitz, and Stock (1981) asked subjects to describe the cause of a successful or unsuccessful future outcome, people who had explained a successful outcome had greater expectations for success and exhibited better performance than those who had explained failure.

**Self-efficacy**

Another expectation which may influence the job search is self-efficacy. Self-efficacy is the belief in one's ability to successfully perform a specific task. It refers to an expectation for performance or confidence in one's own ability to engage in certain behaviors. Bandura introduced self-efficacy within the framework of his version of social learning theory. According to Bandura (1977b) theories proposing drives or other spurious internal causes of behavior have proven to be inadequate to explain complex human behavior. However, in an effort to overcome these inadequacies, radical behaviorism neglected, and perhaps even
actively avoided, addressing cognitive influences on behavior. Bandura did not deny that reinforcement and response consequences influence behavior. However, he suggested that this influence is much more likely to be because of cognitive factors such as the information conveyed through reinforcement or increases in motivation, than through the automatic mechanical reinforcement suggested by the radical behaviorists. In addition, Bandura emphasized the importance of modeling and symbolic influences in learning.

Expectations play a prominent and influential role in Bandura's social learning theory. Bandura described two types of expectations which he believed influenced behavior. He defined efficacy expectations as "a person's estimate that a given behavior will lead to certain outcomes" (Bandura, 1977b, p. 79) and outcome expectations as "the conviction that one can successfully execute the behavior required to produce the outcomes. Outcome and efficacy expectations are differentiated because individuals can come to believe that a particular course of action will produce certain outcomes, but question whether they can perform those actions" (Bandura, 1977b, p.79). Although Bandura acknowledged the influence of outcome expectations, he believed that efficacy expectations had much greater influence on behavior.

According to Bandura, personal, behavioral, and environmental determinants interact in a reciprocal fashion, so that expectations influence behavior and the outcomes of
behavior alter expectations. Expectations are influenced most by performance accomplishments, with success raising expectations and failures lowering expectations. Expectations may also be influenced by live and symbolic modeling, verbal persuasion, and emotional arousal, although the effects of these are generally less permanent and less influential than those gained through performance accomplishments.

Once efficacy expectations have been established through learning, they may generalize from the original learning situation and influence future behaviors. These efficacy expectations may then influence a wide range of behavior including the choice to engage in certain activities and persistence at a task. "Efficacy expectations determine how much effort people will expend and how long they will persist in the face of obstacles and aversive experiences" (Bandura, 1977b, p. 80). "In this conceptual system, expectations of personal mastery affect both initiation and persistence of coping behavior" (Bandura, 1977a, p. 193).

Self-efficacy expectations seem to play an important role in career development. For example, an individual's confidence in his or her ability to perform tasks associated with specific occupations has been found to influence career choice (e.g., Lapan & Jingeleski, 1992; Rooney & Opisow, 1992). This influence results when self-efficacy restricts the perceived range of career options because of beliefs about one's ability to perform the tasks necessary for the job (Betz
& Hackett, 1981; Lent, Brown, & Larkin, 1987; Rotberg, Brown, & Ware, 1987), and seems to be mediated by interests (Lent, Larkin, & Brown, 1989). The influence of self-efficacy on career choice is especially salient when examining confidence in one's math ability and the decision to enter careers requiring math or science (Hackett, 1985; Hackett & Betz, 1981, 1989; Lent, Larkin & Brown, 1989; Post, Stewart & Smith, 1991). Career related self-efficacy has been suggested as a reason for the persistence of a gender gap related to the number of women entering non-traditional careers (Betz & Hackett, 1981, 1983; Lapan, Boggs, & Morrill, 1989; Lips, 1992). For example, Betz and Hackett (1981) found that female college students possessed higher self-efficacy for their performance in occupations which are traditionally held by women than for their performance in male-dominated careers. Male college students displayed equal levels of self-efficacy for male and female dominated occupations. These researchers also report "that self-efficacy expectations were related to both the type and number of occupations considered and to expressed interest in traditional and nontraditional occupations" (p. 399).

Self-efficacy has also been found to be related to the ability to make a decision about a career. Taylor and Betz (1983) introduced the concept of Career Decision-Making Self-Efficacy suggesting that some individuals fail to decide on a career because they do not believe they are able to make that
decision. These researchers found that high levels of vocational indecision are related to low levels of career decision-making self-efficacy among university students. Self-efficacy was especially related to components of indecision related to lack of structure and confidence with respect to career decisions. Taylor and Popma (1990), confirming the findings of Taylor and Betz (1983), reported that career decision-making self-efficacy was negatively related to vocational indecision and locus of control among college students. Matsui & Onglatto (1992) found that career decision-making self-efficacy expectations were negatively related to career choice anxiety among Japanese high school girls.

As Bandura proposed, self-efficacy is also related to achievement and persistence in career related behaviors. Lent, Brown, and Larkin (1984) found that college students with high levels of academic self-efficacy expectations were more successful and persistent preparing for science and engineering careers. Several researchers have also found that choice and persistence in major among those studying math, science, and engineering are related to self-efficacy (Janis & Mann, 1977; Lent, Brown, & Larkin, 1984, 1986; Betz & Hackett, 1983). In addition, self-efficacy has been shown to be related to job performance for occupations for which persistence would seem to be important including sales
(Barling & Beattie, 1983; Lee & Gillen, 1989) and telephone solicitation (Lee, 1988).

Eden and Aviram (1993) demonstrated the influence of self-efficacy on job search behavior in their study of 66 unemployed persons in Israel. These researchers demonstrated that enrolling unemployed individuals in a self-efficacy training session increased the general self-efficacy of those individuals whose pre-treatment self-efficacy was low. These researchers also reported that those with higher general self-efficacy engaged in more job search behaviors and that those who engaged in greater job search activities were more likely to find a job.

Holmes and Werbel (1992) found differences between unemployed and reemployed workers three months after job loss in self-efficacy and six other coping resources. These researchers reported that individuals who became reemployed within three months of job loss had greater self-efficacy than those who remained unemployed. Stumpf, Austin, and Hartman (1984) measured self-efficacy as one of three variables (along with perceived past performance and verbal persuasion) they termed "interview readiness". Their longitudinal study involving graduate business students revealed that the three interview readiness variables were related to degree of career exploration, interview performance ratings and interview outcomes (including call-back interviews and job offers). Wooten (1991) found that self-efficacy influenced job
acceptance behavior among undergraduates participating in mock job interviews. According to the study results, individuals with high self-efficacy made job acceptance decisions based upon personal adjustment, while those with low self-efficacy made decisions based upon skill assessment and autonomy. Blustein (1989) found that self-efficacy and overall goal-directedness was associated with career exploratory behavior among college students.

Expectations about the Job Market

When considering the effects of expectations on behavior, expectations about conditions outside the individual may be as important as expectations about one's self. For job search behavior the most evident of these external expectations involves information about the job market, economic conditions, and expectations for finding a job.

Economic variables have been demonstrated to influence job seeking behavior among employed individuals in the form of turnover. Economic theories emphasize rate of unemployment as an important determinant of turnover. Muchinsky and Morrow (1980) proposed a model of turnover accounting for individual and work factors as well as economic variables. These authors hypothesized that the effects of work-related and personal factors such as job satisfaction, job autonomy and responsibility, vocational interest and length of service, are contingent upon level of economic factors such as unemployment
rate and alternative employment opportunity. During times of high unemployment and few alternative job opportunities, individual's who are not happy with their job will be less likely to quit than during times of low unemployment and plentiful job opportunities.

In their meta-analysis of the literature examining the job satisfaction-turnover relationship, Carsten and Spector (1987) found support for the Muchinsky & Morrow model. These researchers found negative correlations between unemployment rates for dates in which the studies were conducted and the reported size of the relationship between satisfaction and turnover and between intention to quit and turnover. It seems economic variables do influence the choice to leave an organization and engage in job search activities. Employees are much more reluctant to enter a job market in which there are few jobs available.

A study conducted by Dayton (1981) shows that job seekers tend to attribute their lack of success in the job market to economic factors. Dayton presented 35 job-seeking activities and 35 barriers/aids, asking participants to indicate which job seeking activities they had tried and which barriers or aids they found relevant to their experience. Participants indicated that the state of the economy was the greatest barrier to finding a job, with 20% of all participants indicating that the state of the economy served as a barrier to their job search efforts. Also included in the top ten
barriers was unemployment rate, with 18% of the participants indicating that the unemployment rate acted as a barrier.

Because of the importance of economic variables on job search, labor economists have been major contributors to the investigation and understanding of the job search process (Allen & Keaveny, 1980). Reid (1972) examined the effectiveness of job-finding methods from an economist's perspective. In his study of recently laid off workers in engineering and metal-using trades, Reid found that those workers who were most likely to have a difficult time finding a job (i.e., low skill and older workers) were most likely to delay their job search until after their current position ended. This finding was inconsistent with Reid's hypothesis that these workers would be more likely to begin their job search early. Reid suggested that imperfect knowledge of the labor market may have caused these workers to delay their job search; that is, perhaps these older and unskilled workers thought it would be easy to find a job. However, examining results from a questionnaire revealed that the older and unskilled workers were more likely to report that they expected it would be difficult to find a job. For example, 88.6% of the unskilled workers reported that they expected finding a job would be difficult, compared to only 55.6% of the skilled workers. Yet only 17.6% of the unskilled workers, compared with 52.3% of the skilled workers, began their job search before leaving their previous employer.
As an economist, Reid had a difficult time explaining these data. However, it is consistent with a number of theories within the field of psychology, including the expectancy-value theories of behavior. Because these workers believed that their job search efforts would be less likely to be rewarded, they had little motivation to engage in these activities. They therefore delayed their job search as long as possible; in most cases they delayed the search until they were forced to look for a job because their current job had ended.

These findings are consistent with other research indicating that individuals expected to have a more difficult time finding a job often delay entry into the job market. For example, Jones (1985) found that among 16 year old school leavers, poorly qualified applicants made far fewer applications than those with average or above average qualifications. Again, it would seem that those who may have the hardest time finding a job, put less effort into the job search.

Research by Steffy, Shaw, and Noe (1989) also supports the idea that an individual's expectations related to finding a job and his or her own abilities influence job search activities. Using path analysis to examine antecedents and consequences of job search behaviors, these researchers demonstrated that the number of placement recruiting interviews obtained by an individual was influenced by level
of environmental exploration and the certainty that job search efforts would lead to positive placement outcomes. In fact, these two variables exerted more influence on the number of interviews obtained than did search focus or degree of intended or systematic search engaged in (both of which manifested non-significant path coefficients). Rynes (1991) suggests that when applicants first enter the job market, they may be unsure about how difficult it will be to obtain a job. Because their expectancies are not yet fully formed, applicants search for clues to create expectancies related to receiving a job offer. These may include clues such as the way a specific recruiter interacts with an applicant. These expectancies then influence whether or not an individual will be motivated to pursue an offer for any given job.

A study conducted by Rynes and Lawler (1983) indicates that there are vast individual differences in the extent to which expectations about receiving a job offer influence the probability that an individual will pursue a given job lead. In this study, researchers gave participants information about a hypothetical job opening, including information about the probability of receiving a job offer. Each participant was then asked to estimate the probability that he or she would pursue the job offer, that is, apply for the job. A few individuals did report that expectations about whether they will receive a job offer should be deliberately ignored when
deciding whether to pursue a job. These participants stated that the decision should be based solely on job attributes. On the other hand, for most subjects expectancies had a major impact on whether or not to pursue a job offer, with the percent of decision variance explained by main and interactive expectancy effects reaching up to 43%. On the average, expectancy of receiving a job offer did influence the decision whether or not to pursue a job. Subjects reported an average probability of .20 of pursuing a job offer at the 5% level of expectancy, .46 at the 35% level, and .54 at the 65% level. It does appear that at a within-subjects level, individuals are more likely to pursue a job if they believe there is a good probability that it will lead to a job offer.

Rynes and Lawler’s study does show support for the influence of expectations on job search behavior. Unfortunately, decisions made by individuals who are actually applying for real jobs are much more complicated than the behaviors allowed for by the study. In the real job market, expectancies are not fixed, but are subjective estimates made by the individual confronted with the decision of whether or not to apply for the job. These expectancies vary among individuals and may or may not be accurate. For example, we may expect that individuals with high self-efficacy or internal locus of control to consistently over estimate the probability that their efforts will lead to a job offer. Although they did not measure personality variables or similar
personal attributes in their study, Rynes and Lawler (1983) suggest that variables such as risk aversion, self-esteem, need for achievement, or neuroticism may have influenced the variability among individuals in the effect of expectancies on decision to apply for a job.

As mentioned earlier, several individuals in Rynes and Lawler's study stated that they were not influenced at all by the expectancies of a job offer assigned by the researchers. These individuals indicated that expectancies should not make a difference in a person's choice whether to pursue a job, therefore they ignored that variable in making their decisions. However, individuals making actual decisions about whether to apply for a job may be influenced by expectations even if they do not indicate that they would be on a self report measure. Given that students seeking jobs have limited resources, both in terms of money and time, it is unlikely that expectations would actually play no role in the decision about whether to apply for a job.

Economic Psychology

The area of study which most recognizes the influence of expectations and perceptions of the economy on behavior is the field of Economic Psychology. According to van Raaij (1981) "Economic psychology is concerned with the study of economic behavior, its antecedents and consequences. Economic behavior comprises consumer behavior, employment behavior, fiscal
behavior and the reactions of consumers/citizens to economic conditions" (p. 3).

The field of Economic Psychology was founded by George Katona in the early 1950s (Katona, 1951, 1963). At that time, the rapid increase in affluence in the United States following World War II had resulted in an increase in discretionary spending (Katona & Strumpel, 1978). Consumers of the time suddenly had much more control over their spending than they had previously experienced; for the first time they could decide when to spend and when to save. This affluence and ability to regulate spending activities gave consumers much more power in the marketplace, and much greater influence on the economy. "Consequently, when consumers began to spend, the economy improved. Conversely, when consumers began to save, the economy contracted." (Mowen, 1990, p. 684) Today, "fully two-thirds of our gross national product results from consumer spending" (Mowen, 1990, p. 684).

It was in this environment of increased consumer influence in the marketplace, that Katona first introduced his theory of Economic Psychology. Because of the increased influence of consumers in the marketplace, Katona proposed that in order to predict economic conditions, one must look at the attitudes of consumers. Consumers make economic decisions, such as whether they should make large purchases based partly on what they believe will happen in the future. As such, purchase decisions are based in part upon individual
consumer's economic beliefs such as attitude toward the economy as a whole and expected future earnings. According to Katona's model, these attitudes are based upon the actual economic environment, but mediated by "personal characteristics, such as aspirations, expectations, internal versus external control of reinforcement, and life style" (van Raaij, 1981, p. 7). It is these attitudes and subjective interpretations of the economic environment that influence the individual's economic behavior. If a consumer thinks that business conditions will be good, he or she will use this expectation in making economic decisions. He or she may anticipate better conditions in the company for which they work, may in turn feel their earning potential is high, and anticipate their future earnings will increase. This expectation may therefore lead to an increase in spending, purchase of large items, etc. On the other hand, if a consumer feels the economy is poor, he or she may anticipate the possible loss of income or at least feel the potential for earning more money is low. In this case the consumer will be less likely to make major purchases, will be more likely to postpone major purchases until economic times are better or until their perspective on the economy is more optimistic. Aggregated across consumers, these behaviors in turn influence economic conditions. Attitudes toward the economy therefore produce behaviors which in turn influence the economy as a whole.
Katona proposed that researchers should be able to predict changes in the economy by measuring these consumer attitudes. With the founding of the Survey Research Center at the University of Michigan and the development of the Index of Consumer Sentiment, Katona was able to test his theory. What he and his colleagues found was that attitudes and expectations of consumers predicted future economic conditions and consumer expenditures better than traditional economic variables such as absolute or relative income, price increases, etc. (Curtin, 1982; Katona & Strumpel, 1978; van Raaij, 1981).

Although the first issue of the Journal of Economic Psychology cites decisions regarding work and psychological determinants of unemployment as topics of study within the field of economic psychology (van Raaij, 1981), theories of economic psychology have not been applied to the prediction of job seeking behavior.
THE PRESENT STUDY

The current study was designed to examine individual differences in job search behavior and the expectations which may contribute to those differences. Specifically, this study examines expectations about finding a job including expectations about the job market and the individual’s ability to get a job in that job market.

This study is not designed to test a specific theory of motivation or behavior. However, the hypotheses are based in general on the family of theories which recognize the importance of expectations on behavior. The study explores the relationships between expectations and behaviors among job seekers. It was designed to examine the hypothesis that those who do not expect to be rewarded for their job search efforts will be less motivated to engage in job search behaviors, and will in turn delay the onset of their job search, and exert less effort by engaging in fewer and less frequent job search activities.

Although it could be considered within the domain of both vocational and industrial psychology, very few research studies in psychology have focused on the job search itself. Instead, research has tended to focus on career development involving issues such as choice of a career or selection issues dealing with an organization’s choice of the best candidate for a job. A better understanding of the job search
process would contribute our understanding of the career development process as well as the selection process.

One of the challenges facing industrial psychologists is to develop methods to identify job applicants able to perform a specific job well. Unfortunately, despite advances in selection procedures and our understanding of the various influences on selection, job seeking skills continue to influence hiring decisions made by businesses. Even the best selection procedures cannot totally escape the bias produced by differences in job search skills and activities among applicants. By gaining a better understanding of what influences the job seeker to behave in certain ways, industrial psychologists can improve their understanding of what it takes to hire the best candidate for the job.

Gaining a better understanding of the job search also has implications for the career counselor. Research in vocational behavior has traditionally dealt with helping the client select the appropriate career path, focusing on assessment of interests or abilities, matching jobs with people, and tracking development throughout the career course. However, the goal of career counseling intervention is to have the person actually working in a job he or she enjoys and can be successful in. Therefore, understanding of the career process may also be enhanced by a better understanding of the process of finding a job and the expectations which influence job seeking behavior.
METHOD

Participants

Seven hundred twenty four students were randomly selected from all seniors graduating from Iowa State University in Spring 1994. Thirty students' names were dropped from the mailing list because they did not have local in-session addresses listed with the university's registrar's office. Six hundred ninety four questionnaires were sent to graduating college seniors in the last month before graduation.

As an incentive to complete the questionnaire, one dollar was enclosed with each questionnaire. The funds for the incentive were provided by the author. The cover letter accompanying the questionnaire asked that participants choosing not to participate in the study return the questionnaire uncompleted. Reminder telephone calls were made to survey recipients who had not returned their questionnaires after two weeks.

A total of 395 questionnaires were returned: 370 completed and 25 uncompleted, yielding a response rate of 53%. Fifty-three percent of the participants were male (n=194); forty-six percent were female (n=171). Ninety three percent of the participants reported their race to be white (n=344). Participants ranged in age from 20 to 52, with a median age of 22.4. A total of 82 academic majors were represented in the sample (see Appendix A).
Instruments

The survey instrument consisted of scales measuring locus of control, self-efficacy, attitude toward the job market, and job search behavior. It also contained items asking for demographic information including age, sex, race, college major, and grade point average of the participant.

Career locus of control

Locus of control was measured using the Career Locus of Control Scale (Trice, Haire & Elliott, 1989). The Career Locus of Control Scale is an 18-item scale measuring attitudes toward career planning and locus of control related to career development. Trice, Haire and Elliott (1989) report a correlation of .52 with Rotter’s (1966) I-E scale and a non-significant correlation with the Marlowe-Crowne Social Desirability scale (Crowne & Marlowe, 1964). They also report KR-20 internal consistency coefficients ranging from .78 to .82 for various samples of undergraduate students sampled during the scale’s development and validation process.

Scoring the scale in the manner suggested by Trice, Haire, and Elliott produces a scale in which high scores indicate external locus of control, and low scores indicate internal locus of control. These scores were reversed to make the scores on this scale more consistent with other scales included in the study, and to ease in the interpretation of the various analyses. For scores reported in this study, high
scores indicate internal locus of control and low scores indicate external locus of control.

**Self-efficacy**

Two measures of job search self-efficacy were used: the first was a subscale of the Outplacement Needs Inventory (Kanfer & Hulin, 1985) and the second, a measure of job seeking confidence developed by the Institute for Social Research at the University of Michigan (van Ryn & Vinokur, 1992).

The Outplacement Needs Inventory (ONI) is a 38-item questionnaire measuring various constructs related to unemployment and job search behaviors. The instrument contains four major content areas. The first section contains items measuring demographic and background characteristics including age, marital status, length of employment in current job, and knowledge of the community which may be helpful to the job search. The second portion of the ONI measures attitudes toward termination of employment and unemployment including depression, job satisfaction, and perceptions of organizational fairness. The third section of the ONI contains six items measuring self-efficacy expectation for specific job search skills. The final section of the ONI asks about job search behaviors already engaged in and behavioral intentions to apply for new positions.
The job search self-efficacy portion of the ONI asks participants to indicate on a seven point Likert type scale their confidence in their ability to perform six job search behaviors. The rating scale contains three anchors: very unsure of myself, moderately sure of myself, and very sure of myself. Kanfer and Hulin (1985) report coefficient alpha for the job search self-efficacy portion of the scale to be .84.

The second measure of job search self-efficacy was a measure of job seeking confidence developed by the Institute for Social Research at the University of Michigan. This six item scale asks participants to indicate how confident they are that they can perform various job seeking activities such as completing a good job application and resume. The scale requires individuals to indicate their degree of confidence on a five-point scale, ranging from "not at all" (1) to "a great deal" (5).

The Job Seeking Confidence scale was adapted so that the rating scale would be consistent with the seven point scale from the ONI. Internal consistency reliability for the job seeking confidence scale has been reported to be .87 (van Ryn & Vinokur, 1992). The two scales were combined to form one twelve item scale measuring job search self-efficacy, based upon the high internal consistency reliability produced by combining the scales (see Results).
Perceptions of the economy

Two methods of measuring perceptions of the economy were utilized. The first was the Employment Outlook segment of the Career Exploration Survey (Stumpf, Colarelli, & Hartman, 1983) and the second was the Business Conditions segment of the University of Michigan’s Surveys of Consumers, the scale which is used to compute the Index of Consumer Sentiment.

The Survey of Consumers was developed by George Katona in an attempt to measure consumer attitudes which may in turn effect the economy. Since the mid-1940s, the survey has been used by the University of Michigan’s Survey Research Center to predict consumer and economic trends. Research using the survey have shown it to be a successful predictor of a variety of consumer trends including home sales and car sales.

The Survey of Consumers contains 40 core questions covering three broad areas: personal finances, business conditions, and buying conditions. The present study used the business conditions portion of the survey to measure the participants’ expectations and attitudes regarding business conditions. The business conditions portion of the Survey of Consumers contains 12 items asking the participant questions such as whether business conditions are better or worse than a year ago, whether he or she expects a change in unemployment, and whether he or she expects changes in prices and interest rates.
The second measure of attitude about economic conditions was taken from the Career Exploration Survey (CES). The CES was developed by Stumpf, Colarelli, and Hartman (1983) to measure 16 dimensions of the career exploration process. Seven of these dimensions deal with the actual exploration process, such as self-exploration and the number of occupations considered; three of the dimensions deal with reactions to exploration including satisfaction and stress; and six of the dimensions deal with beliefs such as employment outlook and search instrumentality.

The present study used the Employment Outlook segment of the CES. This three item scale was designed to measure an individual's view of the job market for his/her chosen occupation. It asks the participant to indicate on a five point scale ranging from "not good" (1) to "very good" (5) how employment possibilities look for the job(s) he or she prefers, the organization(s) he or she prefers, and the occupation(s) he or she prefers. Stumpf, Colarelli, and Hartman report the coefficient alpha for the Employment Outlook segment of the Career Exploration Survey to be .88.

Job search activity

Past researchers examining job search behavior have measured actual job search activity in a number of ways. These include examining the number of job search activities engaged in (Caplan, Vinokur, Price, & Van Ryn, 1989; Dayton,
1981; Friedrich, 1987; Rowley & Feather, 1987); amount of time spent looking for work (Baik, Hosseini, & Priesmeyer, 1989; Barron & Gilley, 1979; Ellis & Taylor, 1983); and how often an individual looks for a job (Feather, 1992; Feather & O’Brien, 1987; Rowley & Feather, 1987). Conceptually, each of these are important aspects of the job search and each represents a different way to measure the degree to which an individual is involved in the job search process. Because of this, the current study measured all three aspects of job search behavior: number of job search activities engaged in, amount of time spent looking for work, and frequency of job search. The current study also included one additional measure of job search activity: date of entry into the job search process. In addition, the questionnaire asked participants whether they were looking for a job, whether they had received any job offers, and whether they had accepted an offer for full time employment upon graduation.

Number of job search activities engaged in were measured using the job search behaviors portion of the Outplacement Needs Inventory (Kanfer & Hulin, 1985). This scale requires participants to indicate which of seven job search behaviors they have already taken toward obtaining employment. The overall number of search behaviors is measured by summing the number of items marked "yes." Kanfer and Hulin (1985) do not report a reliability coefficient for the job search behavior scale. However, they do report that using this method for
measuring job search activity successful distinguishes between reemployed and unemployed individuals, with reemployed individuals reporting having taken significantly more behavioral actions related to job search than unemployed individuals. They also report that job search self-efficacy scores are significantly correlated with the search behavior measure ($r=.51$).

Frequency of job search was measured using a single item used in a number of studies conducted by Feather (Feather, 1992; Feather & O’Brien, 1987). This item asks participants to indicate how frequently they look for a job by choosing one of the following: not looking for a job, when I feel like it, monthly, weekly, every couple of days, daily. This measure of job-seeking behavior has been shown to be related to job valence, negative affect associated with unemployment, and length of time unemployed (Feather, 1992; Feather & O’Brien, 1987). This item also asked that participants who had already found a job at the time of the survey to indicate how often they looked for work before they found a job.

The amount of time spent looking for work was measured by asking applicants to estimate the total number of hours spent looking for work over the past four weeks. Again, participants who had already found employment were asked to indicate how much time they spent looking for work during the four weeks before they received a job offer. This item was chosen to provide a more behaviorally based and accurate
estimate of time spent job searching than would be obtained by simply asking for a more general estimate of amount of time spent looking for work. The period of time chosen needed to be recent enough to allow for easy recall of how the participant actually spent his or her time. However, because students’ schedules vary from week to week, the period of time needed to be long enough to allow for an accurate measurement even if during a specific week the student had less time to spend job seeking because of tests or projects that happened to be due the week before the survey was sent out. Four weeks seemed to be an amount of time which satisfied both of these requirements.

Date of job search onset was measured by asking applicants to indicate the date they first engaged in each of the job search behaviors indicated on the job search behaviors portion of the ONI. The date associated with each job search behavior was then converted to the number of weeks before graduation to facilitate data analysis. The majority of dates listed for most job search behaviors were within a few months of graduation. However, some participants listed dates well beyond a year before graduation. Dates listed which were one hundred or more weeks before graduation were coded as 99 weeks to reduce the effects of extreme outliers. For most of the analyses, onset of job search was measured by using the earliest date listed for each participant.
RESULTS
Preliminary Analyses

Scale reliabilities

Internal consistency reliabilities were assessed by computing Cronbach’s Coefficient Alpha for all scales (see Table 1). Coefficient Alpha for the Career Locus of Control Scale (Trice, Haire & Elliott, 1989) revealed rather low internal consistency ($r_{xx} = .46$). This coefficient was much lower than those reported by the scale’s authors ($r_{xx} = .78$ to $r_{xx} = .82$ depending upon sample). In the article describing the development of the scale, Trice, Haire and Elliott warned that the reliability coefficient reported may be biased because it was calculated using data from the sample used for the

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Coefficient Alpha</th>
<th># of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Locus of Control Scale</td>
<td>.46</td>
<td>18</td>
</tr>
<tr>
<td>Job Search Self Efficacy (Combined Scale)</td>
<td>.89</td>
<td>12</td>
</tr>
<tr>
<td>Outplacement Needs Inventory</td>
<td>.74</td>
<td>6</td>
</tr>
<tr>
<td>Job Seeking Confidence Scale</td>
<td>.87</td>
<td>6</td>
</tr>
<tr>
<td>Employment Outlook (CES)</td>
<td>.94</td>
<td>3</td>
</tr>
<tr>
<td>Business Conditions Expectations (ICS)</td>
<td>.71</td>
<td>12</td>
</tr>
<tr>
<td>Number of Job Search Steps Employed</td>
<td>.67</td>
<td>9</td>
</tr>
</tbody>
</table>
development of the scale. However, the authors did report that the scale had demonstrated high temporal stability, with stability coefficient $r_{xx}=.93$ for a sample of 41 men retested after three weeks. Although the temporal stability of this scale was not assessed in this study, there is no reason to believe that this study’s participants were fundamentally different from those participating in the study by Trice, Haire, and Elliott. It is therefore probable that the stability coefficient for this scale would be higher than the internal consistency coefficient. However, the validity of any instrument and its ability to predict is limited by its reliability. Therefore, it should be noted that the low internal consistency of this scale may have had an effect on the analyses which included Career Locus of Control as a variable.

As mentioned earlier, Job Search Self Efficacy was measured using two separate six-item scales; one was a subscale of the Outplacement Needs Inventory and the other was the Job Seeking Confidence Scale developed by the Institute for Social Research at the University of Michigan. The decision to combine the two scales into a single measure of job search self-efficacy was made based upon the high internal consistency obtained by combining the scales ($r_{xx}=.89$).

All other scales demonstrated reasonable internal consistency reliability. The three-item Employment Outlook subscale revealed extremely high internal consistency
considering the length of the scale ($r_{xx} = .94$). This was even higher than the $r_{xx} = .88$ reported by the authors (Stumpf, Colarelli, & Hartman, 1983). The reliability of the Business Conditions Expectations segment of the Index of Consumer Sentiment was not extremely high ($r_{xx} = .71$), but was reasonable considering this instrument was actually developed for use as an interview, and not as a paper and pencil survey.

The internal consistency of the Number of Job Search Steps Employed was acceptable, but not high ($r_{xx} = .67$). Because this measure is a check list of activities rather than a homogeneous measure of job search activity, one might expect that the internal consistency would be somewhat lower than that of a scale measuring a unified construct. The checklist included activities which were not equally likely to be performed by students looking for a job. For example, 89.2% of all participants reported that they had prepared a resume; while only 33.6% reported that they had contacted an employment agency or job-finding center. This tendency for some activities to be more commonly performed than others, may lower internal consistency of the checklist when used as a scale. However, the checklist did produce a range of scores (from a minimum of 0 steps to a maximum 8 steps employed) and fair degree of variance ($\bar{X} = 5.25$, $s^2 = 2.98$) which would indicate it is detecting differences among participants in the degree
Correlations between scales

Correlations between scales were examined for all variables (see Table 2). Attitudinal variables tended to be highly correlated with each other, indicating a relationship exists between the various types of attitudes measured. The variable with the lowest correlation with other attitudinal variables was Career Locus of Control. This was probably due in part to the low internal consistency reliability of the scale.

Behavioral variables also tended to be related to each other. Measures of the number of job search steps taken, number of hours spent job searching, and the frequency of job search were all highly related to one another. The behavioral variable exhibiting the lowest correlation with other behavioral variables was the date for onset of job search.

The relationships between attitudinal and behavioral variables were weaker than those among attitudinal variables or those among behavioral variables. The strongest was the relationship between date job search began and career locus of control. Number of job search steps employed tended to be more highly correlated with attitudinal variables than did other job search variables.
Table 2: Pearson product moment correlations among variables (n=370).

<table>
<thead>
<tr>
<th></th>
<th>CARLOC</th>
<th>JOBCONF</th>
<th>OUTLOOK</th>
<th>BUSCOND</th>
<th>NUMSTEPS</th>
<th>JSHOURS</th>
<th>FREQ</th>
<th>DATE</th>
<th>GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARLOC</td>
<td>1.00</td>
<td>.14*</td>
<td>.12*</td>
<td>.14*</td>
<td>.12*</td>
<td>.10</td>
<td>.15*</td>
<td>.18*</td>
<td>.22*</td>
</tr>
<tr>
<td>JOBCONF</td>
<td>1.00</td>
<td>.43*</td>
<td>.19*</td>
<td>.14*</td>
<td>-.02</td>
<td>.10</td>
<td>.11</td>
<td>.01</td>
<td></td>
</tr>
<tr>
<td>OUTLOOK</td>
<td></td>
<td></td>
<td>1.00</td>
<td>.27*</td>
<td>.12*</td>
<td>.07</td>
<td>.07</td>
<td>.15*</td>
<td>-.03</td>
</tr>
<tr>
<td>BUSCOND</td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
<td>.12*</td>
<td>.12*</td>
<td>.15*</td>
<td>.00</td>
<td>-.00</td>
</tr>
<tr>
<td>NUMSTEPS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
<td>.34*</td>
<td>.54*</td>
<td>.15*</td>
<td>-.03</td>
</tr>
<tr>
<td>JSHOURS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
<td>.34*</td>
<td>.06</td>
<td>.05</td>
</tr>
<tr>
<td>FREQ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
<td>-.02</td>
<td>.01</td>
</tr>
<tr>
<td>DATE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
<td>.07</td>
</tr>
<tr>
<td>GPA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
</tbody>
</table>

* p<.05  
CARLOC = Career Locus of Control; JOBCONF = Job Seeking Confidence; OUTLOOK = Employment Outlook; BUSCOND = Business Conditions Expectations; NUMSTEPS = Number of Job Search Steps Employed; FREQ = Frequency of Job Search Behaviors; JSHOURS = # of hours spent job searching over the past four weeks. DATE = Date job search began in weeks before graduation; GPA = Self-reported Grade Point Average.
Tests for collinearity

Correlations were examined to determine whether collinearity would pose a problem in later analyses. Collinearity results when a linear or near linear relationship exists between two or more variables in a regression equation. When this condition exists regression coefficients display very high variances and are highly unstable, causing problems with interpretation of regression coefficients. If a linear relationship exists between variables, it often, although not always, produces correlation coefficients close to one. Although a many of the correlations were statistically significant none were large enough to indicate collinearity existed. The largest correlation coefficient was between frequency of job search and number of job search steps employed (r=.54). This coefficient was not close enough to one to warrant concern over problems of multi-collinearity.

A second way to diagnosis the threat of collinearity is through variance inflation factors (VIF) (see Table 3). These factors measure the degree of "inflation" in the variance of regression coefficients among variables in a regression equation. Formal guidelines for determining whether a given variance inflation factor is too large have not

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARLOC</td>
<td>1.16</td>
</tr>
<tr>
<td>JOBCONF</td>
<td>1.25</td>
</tr>
<tr>
<td>OUTLOOK</td>
<td>1.27</td>
</tr>
<tr>
<td>BUSCOND</td>
<td>1.12</td>
</tr>
<tr>
<td>NUMSTEPS</td>
<td>1.46</td>
</tr>
<tr>
<td>JSHOURS</td>
<td>1.20</td>
</tr>
<tr>
<td>FREQ</td>
<td>1.46</td>
</tr>
<tr>
<td>DATE</td>
<td>1.09</td>
</tr>
<tr>
<td>GPA</td>
<td>1.05</td>
</tr>
</tbody>
</table>

Table 3: Variance inflation factors (VIFs). See Table 2 for explanations of variable name abbreviations.
been established (SAS, 1989). Chatterjee and Price (1977) have suggested that VIFs over 10 indicate that multicollinearity may create problems in estimating regression coefficients, although this criterion may be too stringent for much of the research in the social sciences. Based upon these guidelines, the calculated VIFs presented in Table 3 suggested that collinearity would not present a problem with this set of data.

**Variable means**

Means, standard deviations, minimum and maximum values for all variables are listed in Table 4. All attitudinal variables were scored in a direction which is consistent with what one might intuitively expect, with high scores indicating more of a desirable attitude or trait. For example, high scores on the Career Locus of Control Scale (Career L.O.C.) signify a more internal locus of control; high scores on Job Search Self-Efficacy scale indicate higher self-efficacy; and high scores on scales measuring Employment Outlook (Empmt Outlook) and Business Conditions Expectations (Business Cond) represent more optimistic expectations. Behavioral variables were similarly scored, with high scores indicating more frequent, more diverse, more intense or earlier onset of job search.

All variables produced scores which were distributed across the entire possible range. The mean for most variables
Table 4: Mean scores for all variables for entire sample (n=370).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S.D.</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career L.O.C.</td>
<td>13.18</td>
<td>2.22</td>
<td>7.00</td>
<td>18.00</td>
</tr>
<tr>
<td>Self Efficacy</td>
<td>64.72</td>
<td>10.45</td>
<td>24.00</td>
<td>84.00</td>
</tr>
<tr>
<td>Empmt Outlook</td>
<td>13.78</td>
<td>4.62</td>
<td>3.00</td>
<td>21.00</td>
</tr>
<tr>
<td>Business Cond</td>
<td>29.52</td>
<td>5.32</td>
<td>12.00</td>
<td>41.00</td>
</tr>
<tr>
<td># of Steps</td>
<td>4.87</td>
<td>1.98</td>
<td>0.00</td>
<td>8.00</td>
</tr>
<tr>
<td>Search Frequency</td>
<td>3.94</td>
<td>1.54</td>
<td>1.00</td>
<td>6.00</td>
</tr>
<tr>
<td>Search Hours</td>
<td>15.85</td>
<td>16.70</td>
<td>0.00</td>
<td>99.00</td>
</tr>
<tr>
<td>Onset of Search</td>
<td>42.63</td>
<td>29.40</td>
<td>4.00</td>
<td>99.00</td>
</tr>
<tr>
<td>GPA</td>
<td>3.03</td>
<td>0.46</td>
<td>2.00</td>
<td>4.00</td>
</tr>
</tbody>
</table>

fell around the midpoint of the distribution, or slightly above the midpoint. The variables calculated from open ended questions (i.e., Search Hours and Onset of Search) tended to produce the greatest range and the most variable distributions. The distributions of these variables also tended to be the most skewed.

Participants were grouped according to their response to the question "What do you plan to be doing in Fall 1994?" Table 5 displays the various responses to this question. Based upon their responses, participants were placed into one of three groups: Students planning to be working full time in the fall (n=278), students planning to be doing something other than working full time (i.e., graduate school, the military, etc., n=61), and students who will probably work...
Table 5: Participants' plans for Fall 1994.

<table>
<thead>
<tr>
<th>Plans for Fall</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working Full Time</td>
<td>270</td>
</tr>
<tr>
<td>Graduate or Professional School</td>
<td>51</td>
</tr>
<tr>
<td>Working and Taking Classes</td>
<td>23</td>
</tr>
<tr>
<td>Military or Peace Corps</td>
<td>5</td>
</tr>
<tr>
<td>Unsure or Considering Several Options such as Graduate School, Working, Peace Corp, Etc.</td>
<td>9</td>
</tr>
<tr>
<td>Stay Home with Child/Homemaking</td>
<td>3</td>
</tr>
<tr>
<td>Start Own Business</td>
<td>2</td>
</tr>
<tr>
<td>Farming and Working</td>
<td>2</td>
</tr>
<tr>
<td>Working Part Time</td>
<td>1</td>
</tr>
<tr>
<td>Did not respond to question</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>370</td>
</tr>
</tbody>
</table>

full time, but were considering other alternatives as well (e.g., graduate school, military, etc., n=27). Grouping was based upon the author's judgment about whether each participant would be actively seeking employment based upon his or her response to the question about plans for fall. Therefore, individuals indicating that they planned to start a business were grouped with those planning to be doing something other than working full time. Of the 309 students who were looking for a job, almost half (n=143) had received
an offer and one third (n=103) had accepted an offer for full time employment after graduation.

Scale means were examined for each of the subscales, sorted by participants' plans for fall and employment status after graduation (see Table 6). Multiple discriminant analysis was employed to determine whether the differences between groups were statistically significant. The multivariate F statistic was 5.81 for the differences between those planning to work full time in the fall and with plans other than full time employment; and 6.62 for the differences between those who had already secured employment and those who had not. Both of these were statistically significant at p<.0001, indicating that differences between the groups existed for at least one of the variables.

Univariate statistics were then analyzed to determine which variables produced statistically significant differences. The few differences between the groups were not surprising. As one may expect, those planning to work full time exhibited a higher degree of job search behavior than those who were not. Those planning something other than full time employment, such as graduate school, reported performing fewer job search steps (effect size, d=8.10), looking less frequently (d=7.27) and searching fewer hours (d=6.97) than those planning full time employment. It should be noted that the job search behaviors undertaken by these students were generally related to part-time employment or assistantship to
Table 6: Variable means by Plans for Fall and Employment Status.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Plans for Fall</th>
<th>Employment Status at Time of Study</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Full Time Employment (n=309)</td>
<td>Not Full Time Employment (n=61)</td>
<td>Secured Employment (n=104)</td>
<td>Not Secured Employment (n=202)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Career L.O.C.</td>
<td>13.13</td>
<td>2.26</td>
<td>13.56</td>
<td>2.00</td>
<td>13.35</td>
<td>2.19</td>
</tr>
<tr>
<td>Self Efficacy</td>
<td>64.87</td>
<td>10.49</td>
<td>64.70</td>
<td>9.20</td>
<td>68.87</td>
<td>10.30</td>
</tr>
<tr>
<td>Empmt Outlook</td>
<td>13.78</td>
<td>4.63</td>
<td>13.59</td>
<td>4.58</td>
<td>16.52</td>
<td>3.84</td>
</tr>
<tr>
<td>Business Cond</td>
<td>29.60</td>
<td>5.38</td>
<td>29.18</td>
<td>5.64</td>
<td>30.18</td>
<td>5.31</td>
</tr>
<tr>
<td># of Steps</td>
<td>5.25</td>
<td>1.73</td>
<td>2.95</td>
<td>2.08*</td>
<td>5.45</td>
<td>1.88</td>
</tr>
<tr>
<td>Search Frequency</td>
<td>4.19</td>
<td>1.36</td>
<td>2.53</td>
<td>1.69*</td>
<td>4.24</td>
<td>1.36</td>
</tr>
<tr>
<td>Search Hours</td>
<td>17.16</td>
<td>17.60</td>
<td>7.11</td>
<td>8.06*</td>
<td>17.84</td>
<td>18.95</td>
</tr>
<tr>
<td>Onset of Search</td>
<td>42.14</td>
<td>28.82</td>
<td>44.50</td>
<td>32.90</td>
<td>45.46</td>
<td>30.41</td>
</tr>
<tr>
<td>GPA</td>
<td>3.00</td>
<td>0.45</td>
<td>3.21</td>
<td>0.48*</td>
<td>3.04</td>
<td>0.44</td>
</tr>
</tbody>
</table>

Statistically significant differences (p<.05) between means based upon discriminant analysis are designated with an '*.'
be held during graduate school. Other participants considered searching for and applying to graduate school when answering the questions related to job search activities. Only two participants suggested that they decided on graduate school after beginning their job search. Mean GPA was slightly higher for those having plans other than working full time than for those planning to work full time in the fall (d = 1.75).

There was a difference in Employment Outlook between those who had already secured employment and those who were still looking for a job, with those who had secured employment being more optimistic than those who had not (d = 17.45). Those who had found a job also possessed a greater degree of job search self-efficacy than those who had not yet found a job (d = 5.06). Because of the concurrent nature of the data collection, one cannot be sure whether these attitudes influenced behavior or if experience in the job market influenced attitude. It seems most likely that the attitudes of those who had found a job were more optimistic due to their positive experiences looking for and finding a job.

**Job search steps employed**

The utilization of various job search steps was examined for the 309 participants indicating they planned to be working full time in the fall. For the most part, job seekers tended to use a variety of techniques when looking for a job. The
Figure 1: Job search steps employed by participants planning to work full time in the fall (n=309).

mean number of steps employed was 5.25, the mode was 6 steps, and 73% of the sample indicated that they had employed five or more of the eight steps listed. Only two (0.6%) of the 309 participants indicated they had not yet engaged in any of the job search steps listed, and only 11 (3.6%) indicated that they had employed just one step.

As one might expect, there was variability in the degree to which each of the job search steps was utilized (see Figure 2). Almost all (94.5%) of the participants had already prepared a resume. Almost as many (84.7%) indicated that they
had talked with friends or relatives specifically about job prospects. Other job search steps that were commonly used included looking in the newspaper for openings, telephoning prospective employers, filling out applications for job openings, and obtaining job interviews, with approximately 70% of the sample indicating that they engaged in each of these behaviors.

The least popular job search step listed was contacting an employment agency or a job-finding center, with 35.7% of those planning on full time employment making use of this option. Approximately 28% listed additional search behaviors under the option "Other". These included behaviors such as researching potential employers, sending prospecting letters or letters of application, arranging plant trips, office visits or informational interviews, researching career interests, and obtaining internships or summer jobs from potential future employers.

Job search steps employed by those who had obtained a job offer were compared with those who had not. Discriminant analysis was employed to whether the differences between groups were statistically significant. The multivariate F statistic was 12.23 which was statistically significant at p<.0001, indicating that differences between the groups existed for at least one of the variables.

Univariate statistics were then analyzed to determine which job search steps produced statistically significant
Table 7: Differences in job search steps utilized by students who had obtained job offers and those who had not (n=309).

<table>
<thead>
<tr>
<th>Job Search Steps</th>
<th>Recvd Job Offer</th>
<th>No Job Offer</th>
<th>Effect Size Cohen's d</th>
<th>F-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEWSPR</td>
<td>63.38%</td>
<td>78.66%</td>
<td>.34</td>
<td>2.86</td>
</tr>
<tr>
<td>FRIEND</td>
<td>80.28%</td>
<td>89.02%</td>
<td>.25</td>
<td>0.31</td>
</tr>
<tr>
<td>RESUME</td>
<td>95.77%</td>
<td>93.29%</td>
<td>.11</td>
<td>6.06</td>
</tr>
<tr>
<td>AGENCY</td>
<td>35.21%</td>
<td>36.59%</td>
<td>.23</td>
<td>0.06</td>
</tr>
<tr>
<td>PHONE</td>
<td>83.80%</td>
<td>59.76%</td>
<td>.55</td>
<td>33.79</td>
</tr>
<tr>
<td>APPLY</td>
<td>73.94%</td>
<td>62.80%</td>
<td>.24</td>
<td>15.76</td>
</tr>
<tr>
<td>INTERVW</td>
<td>90.14%</td>
<td>57.93%</td>
<td>.77</td>
<td>68.30</td>
</tr>
<tr>
<td>OTHER</td>
<td>38.73%</td>
<td>18.29%</td>
<td>.47</td>
<td>11.86</td>
</tr>
</tbody>
</table>

differences (see Table 7). The groups of students who had obtained a job offer differed significantly from those who had not primarily in their use of five job search steps. Those who had received offers were much more likely to have 1) telephoned a prospective employer; 2) filled out an application for a job opening; 3) obtained a job interview; 4) performed an additional job search behavior which was not listed on the questionnaire. These students were also somewhat more likely to have prepared a resume than those who had not yet received an offer. Those who had not received an offer were more likely to have looked in the newspaper for openings and talked with friends or relatives about job prospects. Although these differences were not statistically
Table 8: Differences in job search steps utilized by students who had accepted job offers and those who had not (n=309).

<table>
<thead>
<tr>
<th>Job Search Steps</th>
<th>Not Accpt Job Offer</th>
<th>Acpt Job Offer</th>
<th>Effect Size Cohen's d</th>
<th>F-Value</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEWSPR</td>
<td>55.77%</td>
<td>79.60%</td>
<td>.54</td>
<td>12.00</td>
<td>p&lt;.0006</td>
</tr>
<tr>
<td>FRIEND</td>
<td>75.96%</td>
<td>89.55%</td>
<td>.26</td>
<td>1.93</td>
<td>N.S.</td>
</tr>
<tr>
<td>RESUME</td>
<td>93.27%</td>
<td>95.02%</td>
<td>.23</td>
<td>0.27</td>
<td>N.S.</td>
</tr>
<tr>
<td>AGENCY</td>
<td>34.62%</td>
<td>36.82%</td>
<td>.05</td>
<td>0.08</td>
<td>N.S.</td>
</tr>
<tr>
<td>PHONE</td>
<td>82.69%</td>
<td>67.68%</td>
<td>.40</td>
<td>14.92</td>
<td>p&lt;.0001</td>
</tr>
<tr>
<td>APPLY</td>
<td>71.15%</td>
<td>66.17%</td>
<td>.11</td>
<td>3.40</td>
<td>N.S.</td>
</tr>
<tr>
<td>INTERVW</td>
<td>87.50%</td>
<td>65.17%</td>
<td>.51</td>
<td>22.97</td>
<td>p&lt;.0001</td>
</tr>
<tr>
<td>OTHER</td>
<td>44.23%</td>
<td>19.40%</td>
<td>.40</td>
<td>21.94</td>
<td>p&lt;.0001</td>
</tr>
</tbody>
</table>

significant, they may be worth examining since they may indicate these job search steps are somewhat less effective than others listed.

Differences in job search steps utilized were also examined for those who had accepted a job offer and those who had not. Again, discriminant analysis was used to determine whether differences between the groups were statistically significant. The multivariate F-statistic indicated that the groups differed significantly on at least one job search behavior (F=8.53, p<.0001).

Univariate statistics revealed patterns similar, but not identical to those reported above. Again, those who had accepted a job were more likely to have telephoned a
prospective employer, obtained an interview, and engaged in additional behaviors not listed on the survey. Although not statistically significant, those who had accepted a job offer were also slightly more likely to have filled out an application for a job opening than those who had not. Again, those who had not accepted a job offer were much more likely to have looked in a newspaper for openings, and slightly more likely to have talked with friends or relatives about job prospects and prepared a resume.

**Dates for engaging in job search steps**

Dates for engaging in the various job search steps were examined for participants who had engaged in each of the job search steps listed (see Figure 2 & Table 9). Dates listed on the questionnaire were converted to weeks before graduation prior to analysis. The majority of dates listed for most job search behaviors were within a few months of graduation. However, some participants listed dates well beyond a year before graduation. Dates listed which were one hundred or more weeks before

<table>
<thead>
<tr>
<th>Step</th>
<th>Mean</th>
<th>SD</th>
<th>Med</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEWSPR</td>
<td>19.9</td>
<td>16.6</td>
<td>15.9</td>
<td>16</td>
</tr>
<tr>
<td>FRIEND</td>
<td>27.9</td>
<td>23.6</td>
<td>20.8</td>
<td>16</td>
</tr>
<tr>
<td>RESUME</td>
<td>38.6</td>
<td>28.9</td>
<td>29.4</td>
<td>29</td>
</tr>
<tr>
<td>AGENCY</td>
<td>24.6</td>
<td>22.4</td>
<td>16.3</td>
<td>16</td>
</tr>
<tr>
<td>PHONE</td>
<td>19.5</td>
<td>21.0</td>
<td>12.2</td>
<td>8</td>
</tr>
<tr>
<td>APPLY</td>
<td>21.2</td>
<td>21.7</td>
<td>12.2</td>
<td>8</td>
</tr>
<tr>
<td>INTERVW</td>
<td>19.4</td>
<td>20.3</td>
<td>12.1</td>
<td>8</td>
</tr>
<tr>
<td>OTHER</td>
<td>22.8</td>
<td>21.2</td>
<td>15.7</td>
<td>12</td>
</tr>
</tbody>
</table>
Figure 2: Mean, Median, and Modal dates for initiating various job search steps measured in weeks before graduation (n=309).

graduation were coded as 99 weeks to reduce the effects of extreme outliers. The number of participants indicating that they performed a job search step 100 or more weeks before graduation was seven or less for all but two job search steps: preparing a resume or vita and talking with friends or relatives about job prospects. There were 28 participants who indicated that they had prepared a resume more than 99 weeks before graduation and 12 participants who indicated that they had talked with friends or relatives about job prospects more than 99 weeks before graduation. All the distributions of
dates tended to be somewhat positively skewed, with most participants performing most job search behaviors shortly before graduation, and a few starting much earlier. Therefore, the mean dates for each of the behaviors listed tended to be somewhat higher than did the median or modal dates.

The job search behavior which tended to be performed the earliest was preparation of a resume or vita. The mean date for preparing a resume or vita was 38.6 weeks before graduation. The modal date was 29 weeks, with 31 out of 261 respondents reporting this date, and the median was 29.4 weeks before graduation. Twenty-eight participants indicated that they had prepared their resume 100 or more weeks before graduation. This number was higher than for any other job search behavior.

The second earliest step performed tended to be talking with friends or relatives about job prospects. The mean date for performing this behavior was 27.9 weeks, and the median was 20.8 weeks before graduation. The modal date was 16 weeks, with 40 out of 230 respondents reporting this date. Twelve participants indicated that they performed this behavior 100 or more weeks before graduation.

Although few participants reported that they had contacted an employment agency or a job finding center, those who had, tended to do so early: between four and six months before graduation. Looking in the newspaper for openings also
tended to be performed around four to five months before graduation. Telephoning prospective employers, filling out applications for openings, and obtaining job interviews, tended to be conducted closer to graduation, with a modal date for those behaviors just two months before graduation.

Cluster Analysis

Cluster Analysis was used to group job seekers on the basis of the four attitudinal variables: Career Locus of Control, Job Seeking Confidence, Economic Outlook, and Business Conditions Expectations. Ward's (1963) method of cluster analysis was chosen because of its reported effectiveness for recovering underlying structure within the data (Borgen & Weiss, 1971). Ward's method is a hierarchical method which uses an algorithm designed to minimize variance in squared Euclidean distances within clusters. The squared Euclidian distance \(d^2\) is the sum of the squared differences over all of the variables. Because Euclidian distance measures are heavily influenced by units of measurement, all variables were converted to z-scores prior to conducting the cluster analysis. Participants who had indicated that they were not planning to work full time in Fall 1994 were not included in the cluster analysis.

The decision about the appropriate number of clusters for these data was made based upon changes in the semi-partial multiple correlation coefficients (semi-partial \(R^2\)). When
semi-partial $R^2$ was plotted against the number of clusters, a sudden change in slope occurred between the six and seven cluster solutions. This indicates that the amount of additional variance explained by adding a seventh cluster is much less than that for adding a sixth cluster. In other words, little is lost by moving from a seven cluster solution to a six cluster solution, but a great deal of explanatory power is lost when one moves from a six cluster to a five cluster solution. Based upon this information, a six cluster solution was chosen.

After clusters were formed based upon standardized attitudinal variables, attitudinal variables, variables measuring job search behaviors, and mean grade point averages (GPAs) were examined for each of the six resulting clusters. The following describes each of the six clusters.

**First cluster**

Figure 2 displays the standardized variable means for the first cluster. Sixty seven students (31 male, 36 female) were included in this cluster. These students tended to exhibit job search locus of control scores which were slightly more
internal than those of their peers. They also tended to be more optimistic than average in their expectations about business conditions. However, their employment outlook tended to be more pessimistic than that of other students. Their job seeking confidence tended to be about average compared with other students in the sample. These students tended to exhibit slightly higher grades than students in other clusters, with mean GPA for the cluster being 3.12.

These students' job search behavior tended to be only slightly above average compared with other participants. Students in this cluster reported engaging in a mean of 5.37
job search steps, as compared to the mean 5.25 steps for the entire sample of job seekers. 40.9% of the students in this cluster reported that they look for a job weekly, compared to the overall average of 37.6%; 30.3% said that they look for a job every couple of days, and 16.7% said they search daily. Only 12% of the sample reported looking for a job less frequently than weekly, compared to the overall average, 18.8%. These students spent an average of 19.5 hours looking for a job during the four weeks prior to receiving the survey, compared to an average 17.2 hours in the sample as a whole.

The only measure of job search behavior that was below average for this group was the date reported for entering the job search. This group tended to enter the job search later than other groups. The earliest date for engaging in job search behaviors was performed an average of 34.7 weeks before graduation, compared to the mean 42.3 weeks for the overall sample. For example, although more students in this group had prepared a resume (93%) than the overall sample (84%), they tended to have done so later ($X=33.0$ weeks before graduation) than the overall sample ($X=38.6$ weeks before graduation).

This group was somewhat less likely than the entire sample to have received and accepted a job offer. 38.8% reported that they had received an offer for full time, permanent employment upon graduation, 28.4% reported that they
had accepted a full time permanent job for after graduation, and 69.7% said that they were still looking for a job.

Second cluster

The second cluster included 63 students (41 male, 22 female) who tended to be the most optimistic group of students participating in the study (see Figure 3). These students tended to exhibit internal locus of control and were quite confident in their abilities to look for and find a job, when compared to students in other clusters. These students tended to be optimistic about the economy as well, both for their own
career (Occupational Outlook), and for business conditions as a whole (Business Conditions Expectations). Students in this group had earned GPAs which were about average when compared with other clusters ($\bar{X}=2.97$).

Students in this cluster were also more active in engaging in job search behavior than the average student. The mean number of job search steps employed for this cluster was 5.70, compared to the overall average of 5.25. This group tended to have begun their job search earlier than any other group, with the mean first job search step reported having occurred 52.59 weeks before graduation, compared to the overall mean of 42.34 weeks. These students also reported above average frequency of job search: 35.5% reported looking for a job weekly, 27.4% every couple of days, and 25.8% daily. Fewer than 12% of the students in this cluster looked for a job less than once per week. This group of students spent an average of 19.8 hours looking for a job during the four weeks before receiving the survey, as compared to 17.2 hours for the overall group average.

This group was more likely to have received and accepted an offer for a job than were students in other groups. 65.1% reported that they had received an offer for full time, permanent employment upon graduation, 50% reported that they had accepted a full time permanent job for after graduation, and 48.4% said that they were still looking for a job.
Third cluster

The third cluster contained 33 students (22 male, 11 female) who were somewhat optimistic about the economy, but were much less confident in their own ability than were their peers (see Figure 4). These students exhibited Career Locus of Control scores which were very external, falling more than one standard deviation from the overall mean Career Locus of Control score. These students were also far less confident in their ability to look for and find a job than students in other clusters. However, they were quite optimistic in their
view toward the economy and their own careers, with scores on the Employment Outlook scale falling slightly above the overall mean and scores on the scale measuring expectations about business conditions falling well above the overall mean. Their grades were slightly below average when compared to other clusters, with a mean GPA of 2.89.

The job search activities of this group were average when compared with other groups. Students in this group spent a mean 18.1 hours during the previous four weeks looking for a job, compared to the overall mean of 17.2 hours. The mean number of job search steps engaged in was 5.18, compared to the overall mean of 5.25 steps. The date reported for job search initiation was about the same as the overall mean, with this cluster's mean being 41.8 weeks before graduation and the overall mean being 42.3 weeks before graduation. Although the mean frequency of job search was about the same as that for the entire sample, this group displayed the greatest variation in frequency of job search. Over 30% of the cluster reported that they looked for a job less than once per week. This percentage was higher than for any other group, with only 18.7% of the entire sample reporting having looked for a job less than once per week. Yet 33.3% of the group reported that they looked for a job daily, again higher than any other group, with only 17.8% of the entire sample reporting that they looked for a job daily.
Students in this cluster were less likely than other students to have been offered and to have accepted a job. 34.4% reported that they had received an offer for full time, permanent employment upon graduation, 25% reported that they had accepted a full time permanent job for after graduation, and 69.7% said that they were still looking for a job.

![Standardized Variable Means](image)

**Figure 7**: Variable means for the fourth cluster (n=62).

**Fourth cluster**

The fourth cluster contained 62 students (25 male, 36 female, 1 omitted gender) who were far more pessimistic in their outlook toward the job search, their career and business
conditions as a whole (see Figure 5). These students exhibited Career Locus of Control scores which were more external than the mean for the overall sample. They were also less confident in their ability to look for and find a job than were students in other groups, as evidenced by below average scores on the Job Seeking Confidence scale. Both their employment outlook and their expectations about business conditions were well below the mean for the overall sample. Their grades were lower than those of any other cluster, with a mean GPA of 2.87.

Students in this cluster were less active in their job search than were students in other groups. These students reported having engaged in the fewest number of job search steps of any group, \( \bar{X}=4.76 \), compared to the overall sample mean of 5.25 steps. These students also tended to look for a job less frequently than any other group. 27.4% of this group reported looking for a job less than once per week, 35.5% weekly, 30.6% every couple of days. The percent of students looking daily was the lowest of any group, only 6.5% compared with 17.8% of the entire sample reporting that they searched for a job daily.

This group was the least likely to have received and accepted a job offer. 22.6% reported that they had received an offer for full time, permanent employment upon graduation, 12.9% reported that they had accepted a full time permanent
job for after graduation, and 80.3% said that they were still looking for a job.

**Fifth cluster**

This group of 40 students (22 male, 18 female) tended to manifest average scores for all but two variables: the Career Locus of Control and Business Conditions Expectations. These students appear to believe that they have a great deal of control over their ability to find a job, with a mean Career Locus of Control score which was more internal than for any other group. Their confidence in their ability to look for
and find a job was average when compared with the entire sample, as was their employment outlook. However, this group was much more pessimistic in their expectations about business conditions than any other group, as evidenced by a Business Conditions Expectations score more than one standard deviation below the overall group average. In addition, these students reported grades higher than for any other group, with a mean GPA of 3.14.

Students in this cluster tended to exhibit average levels of job search behaviors for all measures including the number of steps performed, the frequency of their job search, and the number of hours spent looking for a job. The mean number of job search steps employed by this group was 5.35, compared with an overall mean of 5.25 steps. This group’s frequency of job search also was very similar to that of the entire sample: 47.5% of this group reported that they look for a job weekly, compared with 37.6% of the entire sample; 27.5% reported looking every couple of days, compared with 25.8% of the entire sample; and 12.5% reported that they looked for a job daily, compared with 17.8% of the entire sample. 12.6% of the students in this cluster reported that they looked for a job less than once per week, compared with 18.7% of the entire sample.

This number of respondents who had received and accepted job offers was about the same for this group as for other groups. 50% reported that they had received an offer for full
time, permanent employment upon graduation, 37.5% reported that they had accepted a full time permanent job for after graduation, and 61.5% said that they were still looking for a job.

Figure 9: Variable means for the sixth cluster (n=35).

Sixth cluster

The last cluster contained 35 students (25 male, 10 female) who were confident and optimistic about their own ability to find a job, yet pessimistic in their expectations about business conditions and external in their locus of control (see Figure 7). Individuals in this cluster tended to
be extremely external in their Locus of Control, much more external than any other group, with a mean Career Locus of Control score more than one standard deviation from the mean for the entire sample. These individuals were confident in their ability to look for and find a job, and optimistic about the prospects for employment. However, their expectations about business conditions as a whole were more pessimistic than most students participating in the study. The grades for students in this cluster tended to be average or just slightly below, with a mean GPA of 2.93.

Students in this cluster tended to employ a greater number of job search steps than did students in the entire sample. The mean number of job search steps employed for this group was 5.59, compared with 5.25 for the entire sample. However, these students reported spending less time searching for a job than did students in the overall sample. Students in this cluster spent an average of 14.58 hours searching for a job during the four weeks before receiving the survey. This is slightly lower than the overall mean of 17.21 hours for the entire sample. Over 25% of the students in this cluster reported that they searched for a job less frequently than once per week, 40% said they looked for a job weekly, 17.1% said every couple of days, and 17.1% daily. These numbers indicate that students in this cluster looked for a job slightly less often than did students in the entire sample. The mean date (41.39 weeks before graduation) for entry into
the job search was about the same as the mean for the entire sample (42.34 weeks before graduation).

Students in this cluster were much more likely than other students to have received and accepted an offer for full time employment. If fact, this cluster contained more students who had received and accepted job offers than any other cluster. 77.1% reported that they had received an offer for full time, permanent employment upon graduation, 60% reported that they had accepted a full time permanent job for after graduation, and 40% said that they were still looking for a job.

MANOVA

Multi-variate analysis of variance was used to determine whether clusters of job seekers formed on the basis of the attitudinal variables differed in their ability (GPA) and job search activities. Job search behavior variables including 1) date for initiating job search, 2) number of job search steps employed, 3) number of hours spent searching, and 4) frequency of job search, were compared across clusters. The multi-variate F-statistic was statistically significant (F=1.56, p<.05), indicating that the clusters differed on at least one of the variables.

Univariate analysis of variance statistics were examined to determine which variables differed. Two variables revealed statistically significant differences: GPA (F=2.58, p<.05) and date for initiating job search (F=3.12, p<.01). Tukey's
Studentized Range Test (Honestly Significant Difference) was used to determine which clusters differed on these two variables (see Table 10).

Results indicated that the second cluster differed from the fourth and first cluster in the date they initiated their job search. Students in the second cluster tended to begin their job search earlier than students in the other clusters. These students also tended to be more optimistic in their expectations about their own career and the economy as a whole. Students belonging to the first and fourth clusters tended to begin their job search later. Students in these clusters also tended to be more pessimistic in their employment outlook than were students in other clusters.

The fourth cluster differed from the first and the fifth cluster in mean GPA. Students in the fourth cluster tended to have lower GPAs than did students in other clusters. Again, this cluster contained students who were less confident in their ability to look for and find a job, and students who had pessimistic expectations about their own careers and the economy as a whole. Students in the first and fifth clusters, whose GPAs tended to be higher, exhibited average job seeking confidence and internal locus of control. Students in the first cluster tended to be optimistic in their expectations about business conditions, but pessimistic in their own employment outlook. Students in the fifth cluster, on the other hand, were pessimistic in their expectations about
business conditions, and average in their own employment outlook.

Table 10: Differences in means between cluster on date of initiating job search and GPA.

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Mean Date (in weeks)</th>
<th>Mean GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Cluster</td>
<td>34.66&lt;sup&gt;a&lt;/sup&gt;</td>
<td>3.12&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Second Cluster</td>
<td>52.59&lt;sup&gt;a&lt;/sup&gt;</td>
<td>2.98&lt;sup&gt;ab&lt;/sup&gt;</td>
</tr>
<tr>
<td>Third Cluster</td>
<td>41.83&lt;sup&gt;ab&lt;/sup&gt;</td>
<td>2.89&lt;sup&gt;ab&lt;/sup&gt;</td>
</tr>
<tr>
<td>Fourth Cluster</td>
<td>36.09&lt;sup&gt;a&lt;/sup&gt;</td>
<td>2.87&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Fifth Cluster</td>
<td>49.76&lt;sup&gt;ab&lt;/sup&gt;</td>
<td>3.14&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Sixth Cluster</td>
<td>41.39&lt;sup&gt;ab&lt;/sup&gt;</td>
<td>2.94&lt;sup&gt;ab&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

Note: Looking down the columns, means with the same letter are not significantly different based upon Tukey's Studentized Range (HSD) with FWe=.05 for each variable. Means are reported as raw scores.
DISCUSSION

Expectancy theory hypothesizes that our behavior is influenced by our expectations about the probability that we will be rewarded for our efforts. As expectations become more optimistic, we are motivated to increase our effort to obtain that reward. The present study applies the basic principles of expectancy theory to behavior in the job market. The study was designed to explore differences in job seekers' attitudes toward the job search process and related differences in behavior in the job market. Specifically, it was hypothesized that, among graduating university seniors, behavior in the job market would depend in part upon their expectations about whether their behavior would be rewarded. Those with optimistic expectations about the job search would engage in more job search activity than those with more pessimistic expectations.

The study found real differences among job seekers in the ways in which they search for a job and their attitudes toward the job search process. The patterns produced by the cluster analysis show some support for the hypothesis relating job search behavior to expectations.

Attitudinal Differences Among Job Seekers

The differences in attitude between those who had and those who had not secured employment at the time of the survey is consistent with research involving unemployed adults.
There were statistically significant differences in attitude between those who had and those who had not secured employment at the time of the survey. Students who had found a job were more confident in their ability to search for and find a job, had a more positive employment outlook and had more optimistic expectations about the economy than those who had not secured employment. Although the differences were not statistically significant, those who had secured employment also exhibited a more internal locus of control, reported having engaged in more job search behaviors, and had a slightly higher mean GPA than did students who had not yet found a job.

These differences are not particularly surprising. One would expect that those who had engaged in more job search behaviors would be more likely to have found a job. It is somewhat surprising, however, that the difference between these groups was not larger. Perhaps more surprising is the fact that the biggest difference between these groups was not behavioral, but attitudinal. The largest differences between those who had found a job and those who had not were the differences in job search self-efficacy and employment outlook. Those who had found a job were much more optimistic about their employment opportunities and had much more confidence in their ability to find a job. It is possible that these differences in attitudes spurred job search activity, which in turn increased the likelihood of employment. However, given the small differences in job
search behavior, it is more likely that the attitudinal differences were caused by positive experiences in the job market.

Differences in attitude between those who had found a job and those who had not are consistent with previous research involving unemployed adults. For example, researchers exploring job search self-efficacy among those who have lost their job have demonstrated that job search self-efficacy is higher among those who have found a job than among those who remain unemployed (Holmes & Werbel, 1992). Consistent with Bandura's theory, job search self-efficacy seems to be influenced by experience in the job market. It would appear that this experience also influences a job seeker's employment outlook.

Students who have not yet graduated from college have probably not yet become discouraged in their job search. The attitudinal variables tended to produce scores which were more optimistic than might be expected from a sample of unemployed non-student adults. Scores on all the attitudinal variables tended to have high means when compared to the range of possible scores, reflecting the tendency toward a more optimistic attitude among the college seniors in the study. Finding a job probably increased scores on attitudinal variables for many students. It is less likely that not finding a job decreased attitudinal variable scores since participants had not really had an opportunity to become
discouraged with the job market. Based upon past research, those who had not found a job some time after graduation, probably became less optimistic in their attitudes toward the job market. Had the study been done after graduation, it is very likely that the means would be lower for these variables reflecting the negative effects of not finding a job on the attitudes of some students.

Behavioral Differences Among Job Seekers

The results of this study suggest that real differences exist among college students in their job search behaviors. There also appear to be real differences in the methods used by those who are successful and those who are not successful in their job search. These differences in job search behaviors suggest a difference in effectiveness of various methods. Those who had obtained and/or accepted a job offer were more likely to have telephoned prospective employers, filled out an application for a job opening, obtained a job interview and performed additional steps not listed on the survey. Those who had not obtained and/or accepted a job offer were more likely to have looked in the newspaper for openings, talked with friends or relatives about job prospects, and contact an employment agency or a job finding center.

It would appear from these results that direct methods such as calling an employer or going to fill out an
application, are more effective than less direct methods, such as networking or looking in the newspaper for openings. However, it could be that the steps utilized more frequently by employed students were steps that are only taken by job seekers in the final stages of the job search. For example, one is often required to fill out an application at the time one is interviewed by the potential employer. This takes place after the person’s resume has been selected and the person is in the final stages of job application. Interviews are also among the last things employers do during the hiring process, after other pre-screening takes place. Those who had obtained interviews with potential employers also have more reason to telephone that employer, whether that phone call is returning the employer call or calling to see if a decision had been made. It is logical, therefore, that those who had obtained employment would be more likely to have engaged in these behaviors.

It is more difficult to explain why students who had not yet obtained or accepted a job offer were more likely to have looked in the newspaper for openings, talked to a friend or relative about job prospects, and contacted an employment agency or job finding center. It is possible that these are less effective methods for searching for a job. It is also possible that these tend to be last resort types of behaviors that are more likely to be used by those who have been unsuccessful in finding a job.
Cluster Analysis Results

The cluster analysis produced some interesting patterns of attitudes and behaviors, and provided some support for the applicability of expectancy theory to job search behavior. The main hypothesis posed by this study dealt with the effects of expectations about the job market on job search behavior. Specifically, it was hypothesized that those with pessimistic expectations would be less motivated to search for a job. Therefore, those who expected it to be difficult to find a job would actually search less, rather than more, for a job. This would be true in part because these individuals believe that the probability is lower that they will be rewarded for their efforts.

Several clusters seem to be supportive of the study's hypothesis, especially the second and the fourth clusters. According to expectancy theory, individuals who do not expect to be rewarded will be less motivated to act and will exhibit less effort than those with more optimistic expectations. The second and fourth clusters represent students with very optimistic and pessimistic expectations toward the job market, based upon their scores on attitudinal variables.

The fourth cluster was the most pessimistic of all the groups. According to the hypothesis, students who are very pessimistic about finding a job should be less motivated to engage in job seeking behavior. This seemed to be true for this cluster, with mean job seeking behavior variables being
lower for Cluster Four than for any other cluster. These students engaged in fewer job search steps, looked less frequently, spent fewer hours searching and entered the job market later than any other group in the study. These students also reported lower GPAs than the students in any other cluster. Like the employees in Reid's (1972) study of recently laid off workers, those who believed it would be difficult to find a job, seemed to avoid the job search process. Also like the employees in Reid's study, these students may have been less qualified than students in other clusters, based upon their GPA. This may influenced job search attitudes, which in turn lead to an avoidance of the job search process. Because of this avoidance, this group is less likely than any other to have found a job.

Because of the concurrent, self-report method of data collection, one cannot be sure that the attitudes were the cause of the behavior. Therefore, other explanations for the pattern seen in the fourth cluster need to be considered. For example, it is possible that the attitudes were the result of experience in the job market. Since very few of the students in this cluster had found jobs at the time they received the survey, it is possible that negative experiences in the job market led to negative, pessimistic attitudes. However, based upon their self-reported job search activity, it appears this group's experience in the job market had been very limited. Because their search experience has been so limited, it is
difficult to imagine that this group could be discouraged already.

The second cluster contained a pattern of variables which also seems to support the hypothesis that attitudes influence behavior in the job market. This group was the most optimistic group in their attitudes about economic and job market conditions and in their expectations about their own ability to influence job search outcomes. This group also engaged in the greatest degree of job search behaviors. Students in this cluster engaged in more job search steps, spent more time searching, looked for a job more often, and tended to have entered the job market earlier than students in other clusters. This cluster would seem to support the hypothesis that expectations about success influence behavior, and that those with more positive expectations for reward are more likely to engage in the behaviors expected to bring that reward.

This group also lends support for the importance of job search activity, rather than qualifications, leading to success in the job market. With a mean GPA that was average when compared with the entire sample, this cluster was more likely than any other cluster to have received and accepted an offer for full time employment.

Again, because of the concurrent method with which the data were collected, caution must be exercised in interpreting these results. Again, we cannot assume that attitudes toward
the job search necessarily lead to increased activity in the job market. Because of the high employment rate for this cluster, it is very likely that experience in the job market influenced attitudes and expectations about participants' abilities to find jobs. An individual who has worked hard and, as a result received a job offer, is much more likely than other students to believe that 1) he or she has control over the outcome in the job search process (Career Locus of Control), 2) he or she is able to successfully perform the steps necessary to obtain a job (Job Seeking Confidence), and 3) economic conditions are favorable for finding employment (Employment Outlook and Business Conditions Expectations). So although this cluster also demonstrates support for the hypothesis that expectations influence behavior in the job market, it is more open to other interpretations because of the probable influence of experience in the job market on attitudes.

The sixth cluster exhibited a pattern of variable means which would seem to present the best support that experiences in the job market influenced the attitudes and expectations of the students. This group displayed an interesting profile of scores, with extremely external locus of control scores and pessimistic expectations about business conditions coupled with a high degree of confidence in one’s ability to find a job and a positive employment outlook.
This unexpected pattern of attitudes is probably the result of the students' experiences in the job market. Except for the variable measuring the number of job search steps employed, this group was below average in their self reported job search activity. Yet this group was more likely than any other group to have received and accepted an offer for full time employment. This group seems to contain students who had received jobs without really looking very hard as compared to other students. In addition, based upon their GPAs, which tended to be average or slightly below average, this group would not appear to be more qualified than students in other clusters. It is no wonder that these students would have high employment expectations and a great deal of confidence in their ability to find a job. It is also intuitive that these students would exhibit external job search locus of control based upon their experiences in the job market.

It is less clear how these experiences might lead to pessimistic expectations about business conditions. It is possible that this attitude was present before the job search began. It is also possible that this pessimistic attitude was the precursor which lead to lower levels of job search activity. However, it is impossible to know what the pattern of attitudes looked like before these students found employment. It would be interesting to see how attitudes may have changed over the course of the job search process.
Directions for Future Research

The present study examined job search attitudes and job search behavior among college students. Differences were found in the attitudes and activities of those who had found and those who had not found employment. This study did not examine the long term effects of the search activities on the job which was eventually found. It would be interesting to find out whether greater degrees of job search behavior lead to a better match between the individual and the job. Future research examining job satisfaction related to these job search activities is needed.

The cluster analysis produced results that seem to support the study's hypothesis at least to some extent. There do seem to be differences in behavior related to differences in job search attitudes. However, the inclusion of additional attitudinal variables in the cluster analysis may have helped to better define the clusters so as to better predict job search behavior. Clearly there are other influences on job search behavior besides one's expectations. Including additional variables in the analysis may have helped clarify the role of expectations by taking into account the effects of these other variables.

One variable that was not included that may have influenced the onset and frequency of job search behavior was the importance of academic achievement to the job seeker. Performing well in classes may have been more important to
some individuals than to others. For others, getting a good job is the reason for being in school; and grades in the last semester are not as important as finding a good job. It is possible that those who felt strongly about performing well in classes were less likely to take time away from course-work to search for a job, regardless of their expectations about their ability to get a job. On the other hand, those for whom college is only a means to an end (that end being employment), may be more likely to spend a great deal of time during their last semester of college looking for a job.

A related variable which may have influenced job search behavior is employment commitment. Research has shown that individuals differ in how much they value employment and the importance that work plays in their lives (Warr & Jackson, 1984). Rowley and Feather (1987) found that employment commitment was related to job search activities among unemployed men, with those who were more committed looking more frequently than those who were less committed. Employment commitment may have also influenced job search behavior among students participating in the present study.

Finally, regardless of one’s expectations, some individuals are simply better at organizing their time, and are more conscientious in pursuing whatever tasks they undertake. Inclusion of variables measuring time structure (Feather & Bond, 1983) and conscientiousness (Schmit, Amel, &
Ryan, 1993) may have contributed to the understanding the relationships examined in this study.

Because there are so many possible influences on job search behavior, it was impractical to include them all in the present study. This study chose to limit the scope to examination of the influence of expectations on job search behavior. The relationship between attitudes and behavior is always complex. Clearly the relationship between job search expectations and job search behavior is also complex. Additional research is needed which includes larger sample sizes, as well as additional variables which may confound the relationship between expectations and job search behavior.

Finally, there may be limits to the generalizability of the findings. The present study examined the effects of expectations on job search behaviors among university seniors. Clearly there may be differences in the job search behaviors of university seniors and other populations. For example, the university students have not truly had an opportunity to become discouraged in their job search. Therefore, the effects of discouragement on the job search could not be observed. In addition, the students in this study represented a wide variety of majors and job choices. Clearly students from various majors experience very different job prospects. In some occupations, job are more easily obtained than in others. This may have influenced job search activities as well as attitudes. We cannot tell from the present study
whether the results had been different if another population of students, say trade school students, had been used instead.
REFERENCES


